

# Reported Tuberculosis in the United States, 2006



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
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# **Reported Tuberculosis in the United States**

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## Preface

Reports of tuberculosis (TB) cases are submitted to the Division of TB Elimination (DTBE), Centers for Disease Control and Prevention (CDC), by 60 reporting areas (the 50 states, the District of Columbia, New York City, Puerto Rico, and seven other jurisdictions in the Pacific and Caribbean). In January 1993, an expanded system was developed to collect additional information for each reported TB case in order to better monitor trends in TB and TB control. A software package (SURVS-TB) for data entry, analysis, and transmission of case reports to CDC was designed and implemented as part of the expanded TB surveillance system. In 1998, the Tuberculosis Information Management System (TIMS) replaced SURVS-TB.

This publication, *Reported Tuberculosis in the United States, 2006*, presents summary data for TB cases reported to DTBE, verified, and counted in 2006. It is similar to previous publications (see page xi, #19) and contains six major sections. The first section presents trends in the overall TB case counts and case rates by selected demographic and clinical characteristics. The second section presents overall case counts and case rates for the United States by selected demographic characteristics for 2006. In the third section, TB case counts and case rates are presented by state and other jurisdictions with tables of selected demographic and clinical characteristics. In the fourth section, data collected as part of the expanded system (e.g., initial drug resistance, HIV status) are presented by reporting area. Select tables report data from the Pacific and Caribbean jurisdictions. The fifth section provides TB case counts and case rates by metropolitan statistical areas (MSAs: see Technical Notes, page 9, for further details) with tables of selected demographic and clinical characteristics. Finally, the sixth section presents figures from the annual surveillance slide set, which emphasize key recent trends in TB epidemiology in the United States. The slides with accompanying text can also be viewed and downloaded from the

Division home page, which is accessible via the Internet at <http://www.cdc.gov/tb/>.

To help interpret the data, an Executive Commentary (page 3) and Technical Notes (page 9) have been included. In addition, the current case definition (*MMWR* 1997;46 [No. RR 10]:40-41) and “Recommendations for Counting Reported Tuberculosis Cases” are provided in Appendices A and B, respectively (page 119). The recommendations for counting TB cases, which update the original January 1977 recommendations, were first published in *Reported Tuberculosis in the United States, 1996*.

After the publication of updated *Guidelines for Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection* in April 2000,<sup>1</sup> DTBE began receiving reports of serious adverse events (i.e., hospitalization or death) related to the use of a 2-month course of rifampin and pyrazinamide (RZ) for treatment of latent tuberculosis infection (TLTBI). Subsequently, DTBE requested and received reports and conducted on-site investigations of liver injury in persons on TLTBI, and treatment guidelines were revised accordingly.<sup>2</sup>

Severe adverse events among persons receiving TLTBI continue to be a public health concern, and data on the annual number and trends of such events are needed. To this end, DTBE organized a working group on TLTBI adverse events in September 2003. This working group was charged with the development of a national surveillance system with the following objectives:

- To assist public health officials, policy makers, and healthcare providers in the prevention of adverse events, and
- To serve as the basis for periodic evaluation of guidelines for TLTBI and revision of these guidelines as needed.

Development of the National System for Severe Adverse Events Associated with Treatment of LTBI has been implemented, and will include

formal collaborations among CDC, FDA, and other participating agencies to ensure inter-agency notification of serious adverse events. Mechanisms for quality assurance and timely dissemination of data are also under development.

At present, DTBE urges health departments, hospices, hospitals, jails, prisons, and private medical offices to report all severe adverse events (e.g., liver injury, metabolic acidosis, anaphylaxis, seizure, severe dermatitis) leading to hospitalization or death of a person receiving TLTB that occurred after January 1, 2004, to DTBE by telephone (404-639-8401) or e-mail (LManangan@cdc.gov).

## **References**

1. ATS/CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *Am J Respir Crit Care Med* 2000;161:S221–S247.
2. American Thoracic Society/CDC. Update: Adverse event data and revised American Thoracic Society/CDC recommendations against the use of rifampin and pyrazinamide for treatment of latent tuberculosis infection—United States, 2003. *MMWR* 2003;52(31):735–9.

## Previous Statistical Reports in this Series:

1. *Special Tuberculosis Projects, 1961–1965*. Atlanta: CDC; 1966.
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3. *Special Tuberculosis Projects, June 1966*. Atlanta: CDC; 1967.
4. *Special Tuberculosis Projects, December 1966*. Atlanta: CDC; 1967.
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15. *Tuberculosis Statistics: States and Cities* (for years 1974–1985). Atlanta: CDC; 1971–1986.
16. *Tuberculosis in the United States* (for years 1974–1986). Atlanta: CDC; 1976–1987.
17. Tuberculosis program management in the United States, 1984. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1986.
18. *Tuberculosis Statistics in the United States* (for years 1987–1992). Atlanta: CDC; 1989–1993.
19. *Reported Tuberculosis in the United States* (for years 1993–2005). Atlanta: CDC; 1994–2006.

**Reports from 1999 through 2006 are available on the Internet at  
<http://www.cdc.gov/tb/surv/default.htm>.**

## State TB Statistics on the Internet\*

AL	<a href="http://www.adph.org/tb/">http://www.adph.org/tb/</a>
AK	<a href="http://www.epi.hss.state.ak.us/id/tb.stm">http://www.epi.hss.state.ak.us/id/tb.stm</a>
AR	None
AZ	<a href="http://www.hs.state.az.us/phs/oids/stats/index.htm#TBStats">http://www.hs.state.az.us/phs/oids/stats/index.htm#TBStats</a>
CA	<a href="http://www.dhs.ca.gov/ps/dcdc/TBCB/publications.html">http://www.dhs.ca.gov/ps/dcdc/TBCB/publications.html</a>
CO	<a href="http://www.cdphe.state.co.us/dc/tb/tbhome.html">http://www.cdphe.state.co.us/dc/tb/tbhome.html</a>
CT	<a href="http://www.dph.state.ct.us/BCH/infectiousdise/tubercul.htm">http://www.dph.state.ct.us/BCH/infectiousdise/tubercul.htm</a>
DC	None
DE	<a href="http://www.dhss.delaware.gov/dph/dpc/tuberculosis.html">http://www.dhss.delaware.gov/dph/dpc/tuberculosis.html</a>
FL	<a href="http://www.doh.state.fl.us/disease_ctrl/tb/">http://www.doh.state.fl.us/disease_ctrl/tb/</a>
GA	<a href="http://health.state.ga.us/epi/tuber.asp">http://health.state.ga.us/epi/tuber.asp</a>
HI	<a href="http://www.hawaii.gov/health/tb">http://www.hawaii.gov/health/tb</a>
IA	<a href="http://www.idph.state.ia.us/adper/tb_control.asp">http://www.idph.state.ia.us/adper/tb_control.asp</a>
ID	None
IL	<a href="http://www.idph.state.il.us/health/infect/reportdis/tb.htm">http://www.idph.state.il.us/health/infect/reportdis/tb.htm</a>
IN	<a href="http://www.in.gov/isdh/programs/tb">http://www.in.gov/isdh/programs/tb</a>
KS	<a href="http://www.kdhe.state.ks.us/tb/statistical_information.html">http://www.kdhe.state.ks.us/tb/statistical_information.html</a>
KY	<a href="http://chfs.ky.gov/dph/tb.htm">http://chfs.ky.gov/dph/tb.htm</a>
LA	<a href="http://www.oph.dhh.state.la.us/tuberculosis/index.html">http://www.oph.dhh.state.la.us/tuberculosis/index.html</a>
MA	<a href="http://www.mass.gov/dph/cdc/tb/index.htm">http://www.mass.gov/dph/cdc/tb/index.htm</a>
MD	<a href="http://www.edcp.org/tb/index.html">http://www.edcp.org/tb/index.html</a>
ME	<a href="http://www.maine.gov/dhs/boh/ddc/tuberculosis.htm">http://www.maine.gov/dhs/boh/ddc/tuberculosis.htm</a>
MI	<a href="http://www.michigantb.org">http://www.michigantb.org</a>
MN	<a href="http://www.health.state.mn.us/tb">http://www.health.state.mn.us/tb</a>
MO	<a href="http://dhss.mo.gov/Tuberculosis/">http://dhss.mo.gov/Tuberculosis/</a>
MT	<a href="http://www.dphhs.state.mt.us/hpsd/Communicable-disease/commun-disease-index.htm">http://www.dphhs.state.mt.us/hpsd/Communicable-disease/commun-disease-index.htm</a>
MS	None
ND	<a href="http://www.health.state.nd.us/disease/tb/">http://www.health.state.nd.us/disease/tb/</a>
NC	<a href="http://www.epi.state.nc.us/epi/tb">http://www.epi.state.nc.us/epi/tb</a>
NE	<a href="http://www.hhs.state.ne.us/cod/Tuberculosis/tbindex.htm">http://www.hhs.state.ne.us/cod/Tuberculosis/tbindex.htm</a>
NH	<a href="http://www.dhhs.state.nh.us/DHHS/BCDCS/LIBRARY/Data-Statistical+Report/tb-counties.htm">http://www.dhhs.state.nh.us/DHHS/BCDCS/LIBRARY/Data-Statistical+Report/tb-counties.htm</a>
NJ	None
NM	None
NYC	<a href="http://www.nyc.gov/html/doh/html/tb/tb.shtml">http://www.nyc.gov/html/doh/html/tb/tb.shtml</a>
NV	<a href="http://health2k.state.nv.us/tuberculosis/Trends.htm">http://health2k.state.nv.us/tuberculosis/Trends.htm</a>
NY	None
OH	<a href="http://www2.odh.ohio.gov/Data/Inf_Dis/TB/tb1.htm">http://www2.odh.ohio.gov/Data/Inf_Dis/TB/tb1.htm</a>
OK	<a href="http://www.health.ok.gov/program/tb/index.html">http://www.health.ok.gov/program/tb/index.html</a>
OR	<a href="http://egov.oregon.gov/dhs/ph/tb/index.shtml">http://egov.oregon.gov/dhs/ph/tb/index.shtml</a>
PA	<a href="http://www.health.state.pa.us/PHP/TB/tb.htm">http://www.health.state.pa.us/PHP/TB/tb.htm</a>
RI	<a href="http://www.health.ri.gov/disease/communicable/tb/index.php">http://www.health.ri.gov/disease/communicable/tb/index.php</a>
PR	<a href="http://www.salud.gov.pr/PDFs/Impresos/estFinalesTB-2003.pdf">http://www.salud.gov.pr/PDFs/Impresos/estFinalesTB-2003.pdf</a>
SC	<a href="http://www.dhec.sc.gov/health/disease/tb">http://www.dhec.sc.gov/health/disease/tb</a>
SD	<a href="http://www.state.sd.us/doh/TB/statistics.htm">http://www.state.sd.us/doh/TB/statistics.htm</a>
TN	<a href="http://www2.state.tn.us/health/CEDS/tb/index.htm">http://www2.state.tn.us/health/CEDS/tb/index.htm</a>
TX	<a href="http://www.tdh.state.tx.us/tb">http://www.tdh.state.tx.us/tb</a>
UT	<a href="http://health.utah.gov/els/hiv/tb/tbrefugee.html">http://health.utah.gov/els/hiv/tb/tbrefugee.html</a>
VA	<a href="http://www.vdh.virginia.gov/std/tbindex.asp">http://www.vdh.virginia.gov/std/tbindex.asp</a>
VT	None
WA	<a href="http://www.doh.wa.gov/cfh/tb">http://www.doh.wa.gov/cfh/tb</a>
WI	<a href="http://www.dhfs.wisconsin.gov/tb">http://www.dhfs.wisconsin.gov/tb</a>
WV	<a href="http://www.wvdhhr.org/idep/dsdc.asp">http://www.wvdhhr.org/idep/dsdc.asp</a>
WY	<a href="http://wdh.state.wy.us/tb/index.asp">http://wdh.state.wy.us/tb/index.asp</a>

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\*As reported to CDC by U.S. reporting area TB programs as of July 2007. Includes responses from the reporting areas of New York City (NYC) and Puerto Rico (PR).

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# **Executive Commentary**



# Executive Commentary

## Highlights of 2006 Report

Since 1953, in cooperation with state and local health departments, the Centers for Disease Control and Prevention (CDC) have collected information on each newly reported case of tuberculosis (TB) disease in the United States. Currently, each individual TB case report (Report of Verified Case of Tuberculosis, or RVCT) is submitted electronically to CDC's Division of Tuberculosis Elimination. The following are highlights of the 2006 report:

1. Updated case counts for each year from 1993 through 2005.
2. Case counts: 13,779 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2006, representing a 2.1% decrease from 2005.
  - Twenty states reported increased case counts from 2005 (Table 28).
  - California, New York, Texas, and Florida accounted for 48% of the national case total (Table 28).
  - For the third consecutive year, Hispanics (30%) exceeded non-Hispanic blacks or African-Americans (27%) as the racial and ethnic group with the largest percentage of total cases (Table 2).
  - Blacks or African-Americans born in the United States represented 44% of TB cases in U.S.-born persons and accounted for approximately 19% of the overall national case total (Tables 17, 18).
3. Case rates: The TB case rate declined from 4.7 to 4.6 per 100,000 population, representing a 3.1% decrease from 2005.
  - Twelve states and DC reported rates above the national average (Table 20).
  - Twenty-six states met the definition for low incidence, which is  $\leq 3.5$  cases per 100,000 population (Table 20).
  - The TB case rate was 2.3 per 100,000 for U.S.-born persons and 22.0 for foreign-born persons (Table 5).
  - Asians and Native Hawaiians or Other Pacific Islanders continue to have the highest case rates (25.6 per 100,000 population) among all racial and ethnic groups (Table 2).
4. Burden in the foreign-born: The percentage of cases occurring in foreign-born persons continued to increase and was 57%.
  - Hispanics and Asians together represented almost 80% of TB cases in foreign-born persons and accounted for 45% of the national case total (Tables 17, 18).
  - In 27 states, the percentage of TB cases among foreign-born persons was  $\geq 50\%$  (Table 23).
  - In 11 states, the percentage of cases among foreign-born persons was  $\geq 70\%$  (Table 23).
  - The top five countries of origin of foreign-born persons with TB were Mexico, Philippines, Vietnam, India, and China (Table 6).
5. Drug resistance: Less than 1% of reported cases had primary multidrug resistance, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin (Table 10).

## **Tuberculosis in the United States**

In 2006, the number of TB cases reported (13,779) and case rate (4.6 cases per 100,000) both decreased; this represented declines of 2.1% and 3.1%, respectively, compared to 2005. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually decreased by 48%. However, the decreasing trend in the annual case rate has slowed, from an annual average decline of 6.6% for 1993 through 2002 to an annual average decline of 3.1% for 2003 through 2006 (Table 1).

The proportion of total cases occurring in foreign-born persons has been increasing since 1993. In 2006, 57% of TB cases occurred in foreign-born persons. Foreign-born persons accounted for the majority of TB cases in the United States for the sixth consecutive year. Moreover, the case rate among foreign-born persons was more than nine times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths decreased by 1.7%, from 657 deaths in 2004 to 646 deaths in 2005, the latest year for which complete data are available (Table 1).

### **Age**

Since 1993, TB case rates have declined annually for all age groups. TB case rates vary by well-known factors such as age, race and ethnicity, and country of origin. In 2006, TB case rates declined for all age groups except adults aged 25 to 44 years, which remained constant, compared to 2005. The highest burden of disease continues to be among older adults. In 2006, adults aged 65 years and older had the highest TB case rate at 7.2 cases per 100,000, and children aged 0 to 14 years had the lowest at 1.3 cases per 100,000 (Table 4).

### **Race and Ethnicity**

In 2003, the race and ethnicity category, “non-Hispanic, Asian or Pacific Islander,” was split into two categories: “non-Hispanic Asian” and

“non-Hispanic Native Hawaiian or Other Pacific Islander.” In 2006, non-Hispanic Asians had the highest TB case rate at 25.6 cases per 100,000, which was a slight decline from 25.7 in 2005. In 2006, non-Hispanic Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 13.6 cases per 100,000, an increase compared to 12.8 cases per 100,000 reported in 2005. Both Native Hawaiian or Other Pacific Islanders and American Indian or Alaska Natives race and ethnicity categories had increases in TB case rates compared to 2005 (Table 2).

Since 1993, TB case rates declined over 50% in each of the other racial and ethnic groups: among Hispanic or Latinos from 19.9 to 9.2 cases per 100,000; among black or African-Americans from 28.5 to 10.2 cases per 100,000; and among non-Hispanic whites from 3.6 to 1.2 cases per 100,000 (Table 2).

### **Origin of Birth**

Since 1993, the TB case rate among U.S.-born persons has declined annually. In 2006, the TB case rate for U.S.-born persons was 2.3 cases per 100,000, representing a 69% decrease from 7.4 cases per 100,000 in 1993. The TB case rate among foreign-born persons also declined during the same interval, but was less substantial. In 2006, the TB case rate among foreign-born persons was 22.0 cases per 100,000, representing a 35% decrease from 34.0 cases per 100,000 in 1993 (Table 5).

The proportion of TB cases among persons born in the United States has declined annually since 1993. In 2006, 43% of TB cases were among U.S.-born persons compared to 69% in 1993 (Table 5). In 27 states, the proportion of TB cases among foreign-born persons was  $\geq 50\%$ . In 11 states (California, Hawaii, Iowa, Massachusetts, Minnesota, Nebraska, New Hampshire, New Jersey, New York, Rhode Island, and Washington), the proportion of TB cases among foreign-born persons was  $\geq 70\%$  (Table 23).

### **Country of Origin and World Region**

From 2001 through 2006, the top five countries of origin of foreign-born persons with TB were Mexico, Philippines, Vietnam, India, and China (Table 6). However, the changes in the distribution of TB cases by world region of origin reflect the changing immigration patterns among persons settling in the United States<sup>1</sup>. Of the 7,799 TB cases reported among foreign-born persons in 2006, 45% occurred among persons born in the Americas region, and 30% occurred among persons born in the Western Pacific region (Table 19). From 1993 to 2006, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 5% in 2006), the Southeast Asia region (6% in 1993 to 10% in 2006), and the African region (2% in 1993 and 8% in 2006) (Table 19).

### **Multidrug-Resistant Tuberculosis**

Since 1993, when the RVCT was expanded to include drug-susceptibility results, the proportion of patients with primary multidrug-resistant TB (MDR TB), which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin, has decreased from 2.4% to 0.9% in 2006. Since 1998, the percentage of U.S.-born patients with MDR TB has remained  $\leq$  0.7%. However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25.5% (103 of 407) in 1993 to 80% (73 of 91) in 2006 (Table 10).

### **Extensively Drug-Resistant Tuberculosis**

For the first time in 2006, CDC included a case count of extensively drug-resistant TB (XDR TB) cases from 1993 to 2006 in the slide set that accompanies this report. Extensively drug-resistant TB is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs (i.e., amikacin, kanamycin, or capreomycin)<sup>2,3</sup>. Three cases of XDR TB were reported during 2006.

### **Tuberculosis Therapy**

The proportion of TB patients prescribed an initial treatment regimen of three or more anti-TB drugs increased annually from 72.1% in 1993 to 87.8% in 2006. The proportion of patients who completed therapy within 1 year increased from 64.1% in 1993 to 82.3% in 2004, and the proportion of persons receiving directly observed therapy for at least a portion of treatment also increased from 35.4% in 1993 to 83.9% in 2004, the latest year for which complete outcome data are available (Table 12).

### **Summary**

Essential elements for controlling TB in the United States include sufficient resources, interventions targeted to populations at high risk for TB, and collaborative efforts with the international community to reduce the burden of TB globally.

During 1993 through 2006, TB case rates in the United States decreased for U.S.-born and foreign-born persons; however, the decrease among foreign-born persons continues to be less substantial. Despite the decreasing case rate among foreign-born persons, more than half of the TB cases in the United States in 2006 occurred in this population, and the case rate was more than nine times higher than among U.S.-born persons. To address these high TB case rates among foreign-born persons, CDC is collaborating with other national and international public health organizations to 1) improve overseas screening of immigrants and refugees by systematically monitoring and evaluating the screening process; 2) strengthen the current notification system that alerts local health departments about the arrival of immigrants or refugees who have suspected TB to enhance the evaluation and treatment of such persons; 3) improve coordination of TB control activities between the United States and Mexico to ensure completion of treatment among TB patients who cross the border; 4) test recent arrivals from high-incidence countries for latent TB infection and monitor treatment completion; and 5) survey foreign-born TB patients in

the United States to determine opportunities for improving prevention and control interventions. In addition, CDC continues to strengthen collaborations with international partners, including the World Health Organization's Stop TB Partnership, to improve TB control in high-incidence countries.

Accelerating progress in national TB elimination activities will require broader prevention efforts among high-risk population groups such as African- and Asian-American communities, persons who are incarcerated, persons with excess alcohol and drug use, persons with human immunodeficiency virus infection, and persons living in poverty with limited access to medical care and stable housing.

In addition, low-incidence areas in the United States require continued support to maintain the capacity and expertise needed to respond to future TB cases<sup>4</sup>. CDC has updated the comprehensive national action plan to reflect the alignment of CDC priorities with the 2000 Institute of Medicine report on TB and to ensure that priority prevention activities are undertaken with optimal collaboration and coordination among national and international public health partners<sup>5,6</sup>.

## References

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5. Institute of Medicine. *Ending Neglect: The Elimination of Tuberculosis in the United States*. Washington, DC: National Academy Press, 2000.

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# Technical Notes





# Technical Notes

## National Surveillance for Tuberculosis

All reporting areas (i.e., the 50 states, the District of Columbia, New York City, Puerto Rico, and other U.S. jurisdictions in the Pacific and Caribbean) report tuberculosis (TB) cases to CDC using a standard case report form, Report of Verified Case of Tuberculosis (RVCT).<sup>1</sup> Reported TB cases are verified according to the TB case definition for public health surveillance (MMWR 1997;46[No. RR-10]:40–41).

Cases may be verified using the laboratory, the clinical case definition, or a provider diagnosis. A case may be verified by the laboratory case definition either by 1) isolation of *Mycobacterium tuberculosis* from a clinical specimen, or 2) detection of *M. tuberculosis* nucleic acid using an FDA approved nucleic acid amplification test and testing methods, or 3) demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained.

A case may be verified by the clinical case definition in the presence of all of the following clinical criteria: 1) a positive tuberculin skin test (TST) result, 2) signs and symptoms compatible with TB, such as an abnormal, unstable (worsening or improving) chest radiograph, or clinical evidence of current disease, 3) treatment with two or more antituberculosis medications, and 4) a completed diagnostic evaluation.

When cases of TB are diagnosed but do not meet the clinical case definition, reporting areas also have the option of verifying TB cases based on provider diagnosis. Currently, the RVCT does not collect information on results from interferon gamma release (IGRA) assays. If this test is performed in lieu of the TST, then the RVCT should reflect that the TST was not performed. Cases without a TST that are diagnosed by a positive IGRA test result should be considered to have been confirmed by provider diagnosis. Another example of a provider diagnosis would

be anergic patients with a clinical picture consistent with TB but without laboratory evidence of *M. tuberculosis*.

In January 1993, in conjunction with state and local health departments, CDC implemented an expanded surveillance system for TB that would collect additional data to better monitor and target groups at risk for TB disease, to estimate and follow the extent of drug-resistant TB, and to evaluate outcomes of TB cases. The RVCT form for reporting TB cases was revised to collect information on occupation, the initial drug regimen, human immunodeficiency virus (HIV) test results, history of substance abuse and homelessness, and residence in correctional or longterm care facilities at the time of diagnosis. RVCT Follow Up Report-1 was added to collect drug susceptibility results for the initial *M. tuberculosis* isolate from patients with culture-positive disease.

To evaluate the outcomes of TB therapy, RVCT Follow Up Report-2 was added to collect information on the reason and date therapy was stopped, the type of healthcare provider, sputum culture conversion, the use of directly observed therapy (DOT), and the results of drug-susceptibility testing for the final *M. tuberculosis* isolate from patients with culture-positive disease.

Since 1993, RVCT data have been reported to CDC using software specifically developed for expanded TB surveillance (i.e., SURVS-TB, 1993–1997; TIMS, 1998–present). The instructions for completing the RVCT forms and the definitions for all data items were included in the software user's guide. The summary data presented in this publication for 2006 (and for 2004, Tables 39–44) and the trend data for 1993–2006 (Tables 1–14) were received at CDC by April 1, 2007.

<sup>1</sup>Other U.S. jurisdictions include American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, the Republic of Palau, and U.S. Virgin Islands.

## Completion of Tuberculosis Therapy

Tables 12, 41, 43, and 44 present rates of completion of TB therapy (COT). Data collected by RVCT Follow Up Report-2 on date and reason therapy stopped (e.g., patient completed therapy, moved, was lost) were used to calculate rates of COT. Cases were stratified by the indicated length of therapy, based on American Thoracic Society/CDC/Infectious Diseases Society of America treatment guidelines<sup>2</sup> in effect during the period covered, and the patient's initial drug susceptibility test results, age, and site of disease. The adequacy of the treatment regimen (e.g., the sufficiency of the duration of therapy, the appropriateness of the prescribed TB drugs) was not evaluated in this analysis. Acquired drug resistance during therapy with the need for a longer duration of therapy was also not considered in this analysis.

In Table 41, the first column shows the total number of cases reported during 2004. The remaining columns are grouped under three headings: therapy of 1 year or less indicated, therapy greater than 1 year indicated, and overall. Patients eligible to complete therapy within one year had to have been alive at diagnosis and initiated therapy with at least one drug. Eligible patients did not have rifampin resistance, did not die during therapy and did not have meningeal tuberculosis, regardless of age. In addition, tuberculosis cases under the age of 15 were not eligible to complete therapy within one year if they had disseminated disease (disseminated disease is defined as miliary tuberculosis and/or a positive tuberculosis blood culture). For patients with culture-negative disease, those with an unknown culture status, and those with culture-positive disease but unknown initial drug-susceptibility test results, data were included under the category of 1 year or less of therapy indicated. Table 12 presents data only for cases where therapy of 1 year or less was indicated. This is a change in COT calculation from previous years.

In Table 41, each group under an indicated

length of therapy has an initial column showing the number of cases in persons who were alive at diagnosis and prescribed an initial regimen of one or more drugs, and who did not die during therapy. This number was used as the denominator in COT rate calculations.

COT rates, shown as percentages, were only calculated for areas reporting reason therapy stopped for at least 90% of cases shown in the overall column. For the group with an indicated length of therapy of 1 year or less, rates are shown for both COT in 1 year or less (COT  $\leq 1$  year) and for COT, regardless of duration (i.e., duration of therapy  $\leq 1$  year,  $>1$  year, or unknown). For COT  $\leq 1$  year, the numerator included only those patients completing therapy in  $\leq 366$  days (based on the dates therapy started and stopped). Patients with missing dates were classified as "treatment not completed" for this calculation.

Rates of COT, regardless of duration, were calculated by dividing the number of patients reported as having completed therapy by the number of total eligible patients. Patients with an outcome other than completed therapy (i.e., moved, lost, refused treatment, and other) were classified as "treatment not completed." Patients with an unknown outcome were also classified as "treatment not completed." For the remaining two groups of indicated therapy length (greater than 1 year and overall), only rates of COT, regardless of duration, are presented. Table 12 provides rates for COT  $\leq 1$  year and for COT, regardless of duration, only for the group with an indicated therapy of 1 year or less. Table 43 presents rates of COT by ethnicity and non-Hispanic race, and by state for those in whom therapy less than 1 year was indicated.

## Site of TB Disease

Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 8, 9, 26, 27, and 47). In publications prior to 1997, miliary disease was classified as extrapulmonary

<sup>2</sup>CDC. Treatment of Tuberculosis, American Thoracic Society, CDC, and the Infectious Diseases Society of America. MMWR 2003;52(No.RR-11):1-77.

TB, unless pulmonary disease was reported as the major site of TB disease.

### **Reporting of HIV Status**

Table 37 shows information on HIV status for persons with TB aged 25–44 years, the age group in which 73% of AIDS cases occur (CDC. HIV/AIDS Surveillance Report 2003; 15). The information on HIV status for TB cases reported in 2006 is incomplete. Reasons for incomplete reporting of HIV test results to the national TB surveillance system include concerns about confidentiality, which may limit the exchange of data between TB and HIV/AIDS programs; laws and regulations in certain states and local jurisdictions that have been interpreted as prohibiting the HIV/AIDS program from sharing the HIV status of TB patients with the TB program, or from reporting patients with TB and AIDS to the TB program; and reluctance by health care providers to report HIV test results to the TB surveillance program staff. In addition, health-care providers may not offer HIV counseling, testing, and referral to some TB patients because of a lack of resources or of appropriately trained staff, or due to the perception that selected patients (e.g., foreign-born persons) are not at risk for HIV infection.

Data on the HIV-infection status of reported TB cases should be interpreted with caution. These data are not representative of all TB patients with HIV infection. HIV testing is performed after a patient receives counseling and gives informed consent. Since testing is voluntary, some TB patients may decline HIV testing. (Current CDC policy, not reflected in 2006 data, recommends all patients in healthcare setting be notified that testing will be performed unless patient declines, or opts out.) TB patients who are tested anonymously may choose not to share the results of HIV testing with their healthcare provider. TB patients managed in the private sector may receive confidential HIV testing, but results may not be reported to the TB program in the health department. In addition, many factors may influ-

ence HIV testing of TB patients, including the extent to which testing is targeted or routinely offered to specific groups (e.g., 25- to 44-year-old males, injecting drug users, homeless persons), and the availability of and access to HIV testing services. These data may overrepresent or underrepresent the proportion of TB patients known to be HIV infected in a reporting area.

### **Tabulation and Presentation of TB Data**

This report primarily presents summary data for TB cases reported to CDC in 2006. Data from the RVCT Follow Up Report-2 (i.e., completion of therapy, use of directly observed therapy, and type of health care provider) are presented for cases reported in 2004. In addition, trend data are presented in Tables 1 through 14. TB cases are tabulated by the year in which the reporting area verified that the patient had TB and included the patient in its official annual TB case count. In contrast to previous annual summaries, in which TB case counts for preceding years were not updated, the current summary reflects updated information on the numbers of cases of confirmed TB for each year from 1993 to 2005. Therefore, case counts for these years differ from those reported in the annual summaries previously published. Totals for the United States only include data from the 50 states, the District of Columbia, and New York City. Age group tabulations are based on the patient's age in the month and year the patient was reported to the health department as a suspected TB case. State or metropolitan area data tabulations are based on the patient's residence at diagnosis of TB (see Appendix B: "Recommendations for Counting Reported Tuberculosis Cases").

Tables 46 through 50 present data by metropolitan statistical areas (MSAs) with an estimated 2006 population of 500,000 or more. MSAs are defined by the federal Office of Management and Budget, and the definitions effective as of December 2006 were used for this publication ([www.census.gov/population/www/estimates/metro\\_general/2006/List4.txt](http://www.census.gov/population/www/estimates/metro_general/2006/List4.txt)). On June 6, 2003,

the OMB announced new MSA definitions based on Census 2000 data, and the information has been updated annually. Some MSAs added or dropped counties and some MSAs merged. The MSA definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. MSAs are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. For example, the TB cases and case rates presented for the District of Columbia in Table 20 include only persons residing within the geographic boundaries of the District. However, the TB cases and case rates for the Washington, D.C., MSA (Table 46) include persons residing within the several counties in the metropolitan area, including counties in Maryland, Virginia, and West Virginia.

## Rates

Rates are expressed as the number of cases reported each calendar year per 100,000 population. Population denominators used in calculating TB rates were based on official census and midyear (July 1) postcensal estimates from the U.S. Census Bureau. Specifically, in Tables 1 and 20, the U.S. total populations for 2000 to 2006 were obtained from the Annual Estimates of the Population for the United States and States, and for Puerto Rico (July 1, 2000–July 1, 2006).<sup>3</sup> In 2003, two modifications were made to the RVCT form: 1) entries for multiple race (two or more races reported for a person) were allowed, and 2) the previous category of Asian/Pacific Islander was divided into “Asian” and “Native Hawaiian or Other Pacific Islander.” To calculate rates in Tables 2 and 3, denominators for 2000 to 2006 were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States: April 1, 2000, to July 1, 2006.<sup>4</sup> To calculate rates for Table 4, denominators were obtained from the Annual Estimates of the Population by Sex

and Five-Year Age Groups for the United States: April 1, 2000, to July 1, 2006.<sup>5</sup> Denominators for computing 2006 rates in Table 16 were obtained from U.S. Census Bureau Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin: July 1, 2006.<sup>6</sup> In 2004, the method for calculating the annual percentage change in the TB case rate was modified. In contrast to methods used in previous summaries, unrounded figures are now applied to calculate the percentage change in the case rate, providing a greater degree of precision and accuracy than in the past.

In Table 5, the populations for U.S.-born and foreign-born persons for 1993 and 1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990, to July 1, 1999.<sup>7</sup> Denominators for computing the 1995–2006 rates were based on extrapolations from the U.S. Census Current Population Survey (March Supplement).

## Mortality Data

Official TB mortality statistics for the United States are compiled by the National Center for Health Statistics (NCHS), CDC. The annual mortality rate is calculated as the number of deaths due to TB in that year, divided by the estimated population for the year, multiplied by 100,000 (Table 1). The number of deaths for 2005 (preliminary) was obtained from the National Center for Health Statistics, e-Stat Deaths: Preliminary Data for 2005, September 2007. For previous years, official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC. The number of deaths for 2006 was not available at the time of this publication.

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<sup>3</sup> <http://www.census.gov/popest/states/tables/NST-EST2006-01.xls>

<sup>4</sup> <http://www.census.gov/popest/national/asrh/NC-EST2006/NC-EST2006-03.xls>

<sup>5</sup> <http://www.census.gov/popest/national/asrh/NC-EST2006/NC-EST2006-01.xls>

<sup>6</sup> <http://www.census.gov/popest/national/asrh/files/NC-EST2005-ALLDATA-R-Files14.txt>

<sup>7</sup> <http://www.census.gov/popest/archives/1990s/nat-nativity-sum.txt>

# **Morbidity Trend Tables United States**





**Table 1. Tuberculosis Cases, Case Rates per 100,000 Population, Deaths, and Death Rates per 100,000 Population, and Percent Change: United States, 1953–2006**

Year	Tuberculosis Cases				Tuberculosis Deaths			
	Number	Rate	Percent Change		Number	Rate	Percent Change	
			Number	Rate			Number	Rate
1953	84,304	52.6	—	—	19,707	12.4	—	—
1954	79,775	48.9	- 5.4	- 7.0	16,527	10.2	-16.1	-17.7
1955	77,368	46.6	- 3.0	- 4.7	15,016	9.1	- 9.1	-10.8
1956	69,895	41.4	- 9.7	-11.2	14,137	8.4	- 5.9	- 7.7
1957	67,149	39.0	- 3.9	- 5.8	13,390	7.8	- 5.3	- 7.1
1958	63,534	36.3	- 5.4	- 6.9	12,417	7.1	- 7.3	- 9.0
1959	57,535	32.4	- 9.4	-10.7	11,474	6.5	- 7.6	- 8.5
1960	55,494	30.7	- 3.5	- 5.2	10,866	6.0	- 5.3	- 7.7
1961	53,726	29.2	- 3.2	- 4.9	9,938	5.4	- 8.5	-10.0
1962	53,315	28.6	- 0.8	- 2.1	9,506	5.1	- 4.3	- 5.6
1963	54,042	28.6	+ 1.4	0.0	9,311	4.9	- 2.1	- 3.9
1964	50,874	26.5	- 5.9	- 7.3	8,303	4.3	-10.8	-12.2
1965	49,016	25.2	- 3.7	- 4.9	7,934	4.1	- 4.4	- 4.7
1966	47,767	24.3	- 2.5	- 3.6	7,625	3.9	- 3.9	- 4.9
1967	45,647	23.0	- 4.4	- 5.3	6,901	3.5	- 9.5	-10.3
1968	42,623	21.2	- 6.6	- 7.8	6,292	3.1	- 8.8	-11.4
1969	39,120	19.3	- 8.2	- 9.0	5,567	2.8	-11.5	- 9.7
1970	37,137	18.1	- 5.1	- 6.2	5,217	2.6	- 6.3	- 7.1
1971	35,217	17.0	- 5.2	- 6.1	4,501	2.2	-13.7	-15.4
1972	32,882	15.7	- 6.6	- 7.6	4,376	2.1	- 2.8	- 4.5
1973	30,998	14.6	- 5.7	- 7.0	3,875	1.8	-11.4	-14.5
1974	30,122	14.1	- 2.8	- 3.4	3,513	1.7	- 9.3	- 5.6
1975	33,989	15.7	—	—	3,333	1.6	- 5.1	- 5.9
1976	32,105	14.7	- 5.5	- 6.4	3,130	1.5	- 6.1	- 6.3
1977	30,145	13.7	- 6.1	- 6.8	2,968	1.4	- 5.2	- 6.7
1978	28,521	12.8	- 5.4	- 6.6	2,914	1.3	- 1.8	- 7.1
1979	27,669	12.3	- 3.0	- 3.9	2,007 <sup>1</sup>	0.9 <sup>1</sup>	-31.1 <sup>1</sup>	30.8 <sup>1</sup>
1980	27,749	12.2	+ 0.3	- 0.8	1,978	0.9	- 1.4	0.0
1981	27,373	11.9	- 1.4	- 2.5	1,937	0.8	- 2.1	-11.1
1982	25,520	11.0	- 6.8	- 7.6	1,807	0.8	- 6.7	0.0
1983	23,846	10.2	- 6.6	- 7.3	1,779	0.8	- 1.5	0.0
1984	22,255	9.4	- 6.7	- 7.8	1,729	0.7	- 2.8	-12.5
1985	22,201	9.3	- 0.2	- 1.1	1,752	0.7	+ 1.3	0.0
1986	22,768	9.5	+ 2.6	+ 2.2	1,782	0.7	+ 1.7	0.0
1987	22,517	9.3	- 1.1	- 2.1	1,755	0.7	- 1.5	0.0
1988	22,436	9.2	- 0.4	- 1.1	1,921	0.8	+ 9.5	+14.3
1989	23,495	9.5	+ 4.7	+ 3.3	1,970	0.8	+ 2.6	0.0
1990	25,701	10.3	+ 9.4	+ 8.4	1,810	0.7	- 8.1	-12.5
1991	26,283	10.4	+ 2.3	+ 1.0	1,713	0.7	- 5.4	0.0
1992	26,673	10.4	+ 1.5	+ 0.1	1,705	0.7	- 0.5	0.0
1993	25,107	9.7	- 5.9	- 7.1	1,631	0.6	- 4.3	-14.3
1994	24,205	9.2	- 3.6	- 4.8	1,478	0.6	- 9.4	0.0
1995	22,728	8.5	- 6.1	- 7.2	1,336	0.5	- 9.6	-16.7
1996	21,210	7.9	- 6.7	- 7.8	1,202	0.5	-10.0	0.0
1997	19,751	7.2	- 6.9	- 8.0	1,166	0.4	- 3.0	-20.0
1998	18,287	6.6	- 7.4	- 8.5	1,112	0.4	- 4.6	0.0
1999	17,501	6.3	- 4.3	- 5.4	930	0.3	-16.4	-25.0
2000	16,310	5.8	- 6.8	- 7.9	776	0.3	-16.6	0.0
2001	15,945	5.6	-2.2	- 3.2	764	0.3	- 1.5	0.0
2002	15,056	5.2	-5.6	- 6.5	784	0.3	+ 2.6	0.0
2003	14,838	5.1	-1.4	- 2.4	711	0.2	- 9.3	-33.3
2004	14,502	4.9	-2.2	- 3.1	657	0.2	- 7.6	0.0
2005	14,080	4.7	-2.9	- 3.8	646 <sup>2</sup>	0.2 <sup>2</sup>	- 1.7 <sup>2</sup>	0.0 <sup>2</sup>
2006	13,779	4.6	-2.1	- 3.1	...	...	...	...

<sup>1</sup>The large decrease in death rate in 1979 occurred because late effects of tuberculosis (e.g., bronchiectasis or fibrosis) and pleurisy with effusion (without mention of cause) are no longer included in tuberculosis deaths.

<sup>2</sup>Preliminary data obtained from National Center for Health Statistics, *E-Stat Deaths: Preliminary Data for 2005*, September, 2007. For previous years, official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC. Percent change in tuberculosis death rates is calculated with rounded figures. See Technical Notes (page 9).

**Note:** 1993 to 2006 tuberculosis case counts and rates updated as of April 6, 2007, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 ([ftp://ftp.cdc.gov/pub/health\\_statistics/nchs/datasets/nvss/bridgedpop/documentationbridged-intercena1.doc](ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgedpop/documentationbridged-intercena1.doc)) (accessed May 21, 2007) and Annual Estimates of the Population for the United States and States, and for Puerto Rico (July 1, 2000– July 1, 2005) ([www.census.gov/popest/states/tables/NST-EST2006-01.xls](http://www.census.gov/popest/states/tables/NST-EST2006-01.xls)) (accessed May 8, 2007). Percent-age change results reported to one decimal. Ellipses indicate data not available. Case data after 1974 are not comparable to prior years due to changes in the surveillance case definition that became effective in 1975. See Surveillance Slides #2 and #3.



**Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race: United States, 1993–2006**

Year	Total Cases	Hispanic or Latino <sup>1</sup>		Non-Hispanic										White		Unknown or Missing <sup>6</sup>
		No. (%)	Rate	Multiple Race <sup>2</sup>	American Indian or Alaska Native	Asian <sup>3</sup>	Asian or Pacific Islander <sup>4</sup>	Black or African American	Native Hawaiian or Other Pacific Islander <sup>5</sup>	White		Unknown or Missing <sup>6</sup>		No. (%)	Rate	No. (%)
1993	25107	5140 (20)	19.9	...	271 (1)	13.9	...	3699 (15)	44.1	8942 (36)	28.5	...	...	6889 (27)	3.6	166 (1)
1994	24205	5016 (21)	18.6	...	327 (1)	16.4	...	3842 (16)	43.8	8370 (35)	26.2	...	...	6561 (27)	3.4	89 (0)
1995	22728	4831 (21)	17.2	...	320 (1)	15.7	...	4000 (18)	43.5	7549 (33)	23.2	...	...	5958 (26)	3.1	70 (0)
1996	21210	4491 (21)	15.2	...	286 (1)	13.6	...	3813 (18)	39.7	7091 (33)	21.5	...	...	5479 (26)	2.8	50 (0)
1997	19751	4218 (21)	13.7	...	264 (1)	12.3	...	3825 (19)	38.0	6599 (33)	19.6	...	...	4821 (24)	2.5	24 (0)
1998	18287	4090 (22)	12.6	...	254 (1)	11.5	...	3637 (20)	34.7	5817 (32)	17.0	...	...	4473 (24)	2.3	16 (0)
1999	17501	3865 (22)	11.4	...	243 (1)	10.7	...	3607 (21)	32.9	5544 (32)	16.0	...	...	4216 (24)	2.1	26 (0)
2000	16310	3803 (23)	10.7	...	232 (1)	11.0	...	3463 (21)	32.0	5145 (32)	15.0	...	...	3637 (22)	1.9	30 (0)
2001	15945	4009 (25)	10.8	...	227 (1)	10.7	...	3556 (22)	31.6	4772 (30)	13.7	...	...	3338 (21)	1.7	43 (0)
2002	15056	3973 (26)	10.3	...	180 (1)	8.4	...	3302 (22)	28.2	4320 (29)	12.3	...	...	2959 (20)	1.5	322 (2)
2003	14838	4116 (28)	10.3	38 (0)	178 (1)	8.2	3457 (23)	29.5	...	4157 (28)	11.7	64 (0)	16.4	2789 (19)	1.4	39 (0)
2004	14502	4187 (29)	10.1	35 (0)	157 (1)	7.1	3334 (23)	27.6	...	4069 (28)	11.3	63 (0)	15.8	2630 (18)	1.3	27 (0)
2005	14080	4047 (29)	9.4	46 (0)	152 (1)	6.8	3208 (23)	25.7	...	3954 (28)	10.9	52 (0)	12.8	2577 (18)	1.3	44 (0)
2006	13779	4066 (30)	9.2	35 (0)	167 (1)	7.4	3298 (24)	25.6	...	3737 (27)	10.2	56 (0)	13.6	2403 (17)	1.2	17 (0)

<sup>1</sup>Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.

<sup>3</sup>Asian race first reported in 2003.

<sup>4</sup>Asian or Pacific Islander race reported 1993–2002.

<sup>5</sup>Native Hawaiian or Other Pacific Islander race first reported in 2003.

<sup>6</sup>The high unknown race results for 2002 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

**Note:** Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1993–1999 (<http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>). Denominators for computing 2000–2005 case rates were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States: April 1, 2000, to July 1, 2006 (<http://www.census.gov/popest/national/asrh/NC-EST2006-03.xls>) (accessed May 21, 2007).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.

Data for all years updated through April 6, 2007.

See Technical Notes (page 9).

See Surveillance Slides #8 and #9.

**Table 3. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Race Only: United States, 1993–2006**

Year	Total Cases	Multiple Race <sup>1</sup>		American Indian or Alaska Native		Asian <sup>2</sup>		Asian or Pacific Islander <sup>3</sup>		Black or African American		Native Hawaiian or Other Pacific Islander <sup>4</sup>		White		Unknown or Missing <sup>5</sup>	
		No.	(%) Rate	No.	(%) Rate	No.	(%) Rate	No.	(%) Rate	No.	(%) Rate	No.	(%) Rate	No.	(%) Rate	No.	(%)
1993	25107	...	...	275	(1) 12.1	...	...	3743	(15) 42.5	9132	(36) 28.0	...	...	11897	(47) 5.5	60	(0)
1994	24205	...	...	336	(1) 14.2	...	...	3870	(16) 42.1	8607	(36) 25.9	...	...	11326	(47) 5.2	66	(0)
1995	22728	...	...	328	(1) 13.4	...	...	4027	(18) 41.9	7755	(34) 22.9	...	...	10549	(46) 4.8	69	(0)
1996	21210	...	...	292	(1) 11.5	...	...	3846	(18) 38.4	7286	(34) 21.2	...	...	9754	(46) 4.4	32	(0)
1997	19751	...	...	277	(1) 10.5	...	...	3864	(20) 36.9	6785	(34) 19.4	...	...	8808	(45) 3.9	17	(0)
1998	18287	...	...	263	(1) 9.6	...	...	3674	(20) 33.8	5955	(33) 16.7	...	...	8376	(46) 3.7	19	(0)
1999	17501	...	...	254	(1) 9.0	...	...	3643	(21) 32.1	5656	(32) 15.6	...	...	7909	(45) 3.5	39	(0)
2000	16310	...	...	241	(1) 9.0	...	...	3496	(21) 31.3	5266	(32) 14.7	...	...	7279	(45) 3.2	28	(0)
2001	15945	...	...	240	(2) 8.8	...	...	3591	(23) 30.9	4871	(31) 13.4	...	...	7185	(45) 3.1	58	(0)
2002	15056	...	...	198	(1) 7.2	...	...	3319	(22) 27.5	4406	(29) 12.0	...	...	6754	(45) 2.9	378	(3)
2003	14838	50	(0) 1.2	188	(1) 6.7	3507	(24) 29.3	...	...	4248	(29) 11.5	66	(0) 13.3	6752	(46) 2.9	27	(0)
2004	14502	46	(0) 1.0	164	(1) 5.8	3368	(23) 27.3	...	...	4184	(29) 11.2	65	(0) 12.8	6644	(46) 2.8	31	(0)
2005	14080	54	(0) 1.2	168	(1) 5.9	3255	(23) 25.5	...	...	4073	(29) 10.7	55	(0) 10.6	6443	(46) 2.7	32	(0)
2006	13779	41	(0) 0.9	197	(1) 6.8	3330	(24) 25.3	...	...	3864	(28) 10.1	64	(0) 12.1	6253	(45) 2.6	30	(0)

<sup>1</sup>Indicates two or more races reported for a person. Category first reported in 2003.

<sup>2</sup>Asian race first reported in 2003.

<sup>3</sup>Asian or Pacific Islander race reported 1993–2002.

<sup>4</sup>Native Hawaiian or Other Pacific Islander race first reported in 2003.

<sup>5</sup>The high unknown race results for 2002 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

**Note:** Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1993–1999 (<http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>). Denominators for computing 2000–2005 case rates were obtained from the Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for the United States: April 1, 2000, to July 1, 2006 (<http://www.census.gov/popest/national/asrh/NC-EST2006-03.xls>) (accessed May 21, 2007).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.

Data for all years updated through April 6, 2007.

See Technical Notes (page 9).

See Surveillance Slides #8 and #9.

**Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2006**

Year	Total Cases	0–14			15–24			25–44			45–64			≥65			Unk. <sup>1</sup>	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	1661	(7)	2.9	1823	(7)	5.0	9587	(38)	11.5	6197	(25)	12.4	5820	(23)	17.7	19	(0)
1994	24205	1659	(7)	2.9	1833	(8)	5.0	9043	(37)	10.7	6125	(25)	11.9	5539	(23)	16.6	6	(0)
1995	22728	1536	(7)	2.6	1698	(7)	4.6	8201	(36)	9.7	5960	(26)	11.3	5328	(23)	15.8	5	(0)
1996	21210	1356	(6)	2.3	1637	(8)	4.4	7564	(36)	8.9	5572	(26)	10.2	5076	(24)	14.9	5	(0)
1997	19751	1251	(6)	2.1	1675	(8)	4.5	6884	(35)	8.0	5277	(27)	9.4	4663	(24)	13.6	1	(0)
1998	18287	1077	(6)	1.8	1542	(8)	4.1	6335	(35)	7.4	4956	(27)	8.5	4377	(24)	12.6	0	(0)
1999	17501	1039	(6)	1.7	1518	(9)	3.9	6063	(35)	7.1	4858	(28)	8.0	4020	(23)	11.6	3	(0)
2000	16310	964	(6)	1.6	1617	(10)	4.1	5575	(34)	6.6	4637	(28)	7.4	3516	(22)	10.0	1	(0)
2001	15945	929	(6)	1.5	1597	(10)	4.0	5609	(35)	6.6	4515	(28)	7.0	3293	(21)	9.3	2	(0)
2002	15056	944	(6)	1.6	1497	(10)	3.7	5288	(35)	6.3	4182	(28)	6.3	3141	(21)	8.8	4	(0)
2003	14838	912	(6)	1.5	1573	(11)	3.8	5073	(34)	6.0	4283	(29)	6.2	2994	(20)	8.3	3	(0)
2004	14502	954	(7)	1.6	1602	(11)	3.8	4940	(34)	5.9	4194	(29)	5.9	2811	(19)	7.7	1	(0)
2005	14080	857	(6)	1.4	1544	(11)	3.7	4739	(34)	5.6	4125	(29)	5.7	2815	(20)	7.7	0	(0)
2006	13779	807	(6)	1.3	1540	(11)	3.6	4702	(34)	5.6	4053	(29)	5.4	2676	(19)	7.2	1	(0)

<sup>1</sup>Includes unknown and missing.

**Note:** Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates (<http://www.cdc.gov/nchs/about/major/dvs/popbridge/popridge.htm>) (accessed May 18, 2007). Denominators for computing 2000–2006 case rates were obtained from the Annual Estimates of the Population by Sex and Five-Year Age Groups for the United States: April 1, 2000, to July 1, 2006 (<http://www.census.gov/popest/national/asrh/NC-EST2006/NC-EST2006-01.xls>) (accessed May 18, 2007). Data for all years updated through April 6, 2007.

See Technical Notes (page 9).

Zero % (0) denotes <0.5%.

See Surveillance Slides #5 and #6.

**Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2006**

Year	Total Cases	U.S.-born Persons			Foreign-born Persons <sup>1</sup>			Unknown or Missing	
		No.	(%)	Rate	No.	(%)	Rate	No.	(%)
1993	25107	17422	69	7.4	7403	29	34.0	282	1
1994	24205	16171	67	6.8	7741	32	34.6	293	1
1995	22728	14647	64	6.1	7987	35	34.8	94	0
1996	21210	13315	63	5.6	7726	36	31.5	169	1
1997	19751	11879	60	4.9	7742	39	30.0	130	1
1998	18287	10632	58	4.4	7599	42	28.9	56	0
1999	17501	9806	56	4.0	7602	43	29.2	93	1
2000	16310	8648	53	3.5	7619	47	27.3	43	0
2001	15945	7869	49	3.2	8011	50	27.0	65	0
2002	15056	7281	48	2.9	7718	51	25.4	57	0
2003	14838	6861	46	2.7	7930	53	23.5	47	0
2004	14502	6656	46	2.6	7822	54	23.2	24	0
2005	14080	6332	45	2.5	7718	55	22.3	30	0
2006	13779	5934	43	2.3	7799	57	22.0	46	0

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

**Note:** Denominators for computing rates for years 1993–1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990–July 1, 1999, located at <http://www.census.gov/population/estimates/nation/nativity/fbtabs001.txt> (accessed May 31, 2007). Denominators for computing the 1995–2006 rates are based on the U.S. Census Bureau, Current Population Survey (March Supplement). Data for all years updated through April 6, 2007.

Zero % (0) denotes <0.5%.

See Surveillance Slides #11 through #16.

**Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons<sup>1</sup> by the Top 30 Countries<sup>2</sup> of Origin of Birth: United States, 2002–2006**

Country of Origin	Year									
	2006		2005		2004		2003		2002	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>Total Cases</b>	<b>7799</b>	<b>(100)</b>	<b>7718</b>	<b>(100)</b>	<b>7822</b>	<b>(100)</b>	<b>7930</b>	<b>(100)</b>	<b>7718</b>	<b>(100)</b>
Mexico	1,929	(25)	1,956	(25)	1,988	(25)	2,034	(26)	1,906	(25)
Philippines	861	(11)	828	(11)	829	(11)	913	(12)	870	(11)
Vietnam	632	(8)	576	(7)	620	(8)	662	(8)	658	(9)
India	544	(7)	563	(7)	561	(7)	609	(8)	587	(8)
China	377	(5)	396	(5)	350	(4)	374	(5)	356	(5)
Haiti	211	(3)	239	(3)	247	(3)	264	(3)	264	(3)
Korea, Rep.	206	(3)	176	(2)	219	(3)	194	(2)	210	(3)
Guatemala	226	(3)	211	(3)	189	(2)	173	(2)	149	(2)
Ethiopia	201	(3)	154	(2)	169	(2)	142	(2)	131	(2)
Peru	159	(2)	154	(2)	159	(2)	157	(2)	151	(2)
Ecuador	117	(2)	156	(2)	159	(2)	159	(2)	150	(2)
Somalia	196	(3)	148	(2)	140	(2)	105	(1)	142	(2)
Honduras	163	(2)	165	(2)	112	(1)	125	(2)	136	(2)
El Salvador	145	(2)	141	(2)	125	(2)	116	(1)	152	(2)
Cambodia	99	(1)	106	(1)	107	(1)	118	(1)	75	(1)
Dominican Republic	112	(1)	76	(1)	104	(1)	96	(1)	91	(1)
Pakistan	80	(1)	78	(1)	89	(1)	91	(1)	80	(1)
Lao, PDR	60	(1)	84	(1)	88	(1)	73	(1)	89	(1)
Kenya	73	(1)	66	(1)	68	(1)	79	(1)	80	(1)
Thailand	55	(1)	72	(1)	60	(1)	45	(1)	33	(0)
Colombia	45	(1)	37	(0)	68	(1)	58	(1)	52	(1)
Cuba	42	(1)	55	(1)	56	(1)	49	(1)	58	(1)
Indonesia	45	(1)	57	(1)	36	(0)	54	(1)	52	(1)
Nigeria	37	(0)	36	(0)	52	(1)	56	(1)	56	(1)
Liberia	52	(1)	64	(1)	54	(1)	30	(0)	26	(0)
Nepal	43	(1)	33	(0)	48	(1)	39	(0)	28	(0)
Burma	40	(1)	39	(1)	41	(1)	31	(0)	38	(0)
Russia	47	(1)	44	(1)	28	(0)	30	(0)	38	(0)
Bangladesh	42	(1)	34	(0)	38	(0)	29	(0)	34	(0)
Brazil	42	(1)	37	(0)	30	(0)	26	(0)	35	(0)
All Others <sup>3</sup>	918	(12)	937	(13)	988	(13)	999	(13)	991	(13)

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>2</sup>The top 30 countries were selected based on their ranked 5-year average number of TB cases.

<sup>3</sup>Includes Not Specified for Country of Origin. Excludes missing.

**Note:** Zero (0) denotes <0.5%.

Data for all years updated through April 6, 2007.

**Table 7. Tuberculosis Cases and Percentages Among Adult<sup>1</sup> Foreign-born Persons<sup>2</sup> by Country of Origin and Years in the United States Before TB Diagnosis, Top 30 Countries: United States, 2006 and 1996**

Country of Origin <sup>3</sup>	2006						Country of Origin <sup>3</sup>	1996										
	No. of Years in U.S. <sup>4</sup>							No. of Years in U.S. <sup>4</sup>										
	Total Cases	<1 Year	1–4 Years	≥5 Years	Unknown			Total Cases	<1 Year	1–4 Years	≥5 Years	Unknown						
	No.	No.	(%)	No.	(%)	No.		(%)	No.	(%)	No.	(%)	No.	(%)				
Mexico	1866	283	(15)	368	(20)	1010	(54)	205	(11)	1650	205	(12)	249	(15)	717	(43)	479	(29)
Philippines	855	199	(23)	138	(16)	436	(51)	82	(10)	1025	294	(29)	138	(13)	349	(34)	244	(24)
Viet Nam	618	129	(21)	74	(12)	333	(54)	82	(13)	846	196	(23)	189	(22)	257	(30)	204	(24)
India	538	116	(22)	142	(26)	219	(41)	61	(11)	405	81	(20)	85	(21)	112	(28)	127	(31)
China	373	61	(16)	55	(15)	218	(58)	39	(10)	384	42	(11)	75	(20)	168	(44)	99	(26)
Guatemala	220	45	(20)	83	(38)	78	(35)	14	(6)	295	36	(12)	52	(18)	81	(27)	126	(43)
Korea, Rep of	206	16	(8)	24	(12)	136	(66)	30	(15)	270	30	(11)	36	(13)	112	(41)	92	(34)
Haiti	205	26	(13)	34	(17)	125	(61)	20	(10)	180	26	(14)	23	(13)	71	(39)	60	(33)
Ethiopia	191	44	(23)	84	(44)	53	(28)	10	(5)	122	18	(15)	29	(24)	26	(21)	49	(40)
Somalia	180	77	(43)	45	(25)	51	(28)	7	(4)	121	5	(4)	27	(22)	62	(51)	27	(22)
Honduras	162	53	(33)	41	(25)	57	(35)	11	(7)	121	5	(4)	6	(5)	68	(56)	42	(35)
Peru	157	27	(17)	53	(34)	63	(40)	14	(9)	119	21	(18)	29	(24)	25	(21)	44	(37)
El Salvador	142	29	(20)	24	(17)	77	(54)	12	(8)	115	16	(14)	25	(22)	39	(34)	35	(30)
Ecuador	117	15	(13)	44	(38)	46	(39)	12	(10)	95	12	(13)	19	(20)	26	(27)	38	(40)
Dominican Republic	108	16	(15)	17	(16)	56	(52)	19	(18)	90	8	(9)	3	(3)	48	(53)	31	(34)
Cambodia	98	7	(7)	18	(18)	64	(65)	9	(9)	83	25	(30)	20	(24)	14	(17)	24	(29)
Pakistan	77	14	(18)	12	(16)	42	(55)	9	(12)	80	5	(6)	4	(5)	20	(25)	51	(64)
Kenya	68	20	(29)	24	(35)	18	(26)	6	(9)	79	12	(15)	16	(20)	21	(27)	30	(38)
Lao	60	1	(2)	3	(5)	48	(80)	8	(13)	70	39	(56)	11	(16)	2	(3)	18	(26)
Thailand	54	10	(19)	14	(26)	26	(48)	4	(7)	65	21	(32)	12	(18)	17	(26)	15	(23)
Colombia	45	3	(7)	9	(20)	28	(62)	5	(11)	59	5	(8)	9	(15)	18	(31)	27	(46)
Indonesia	45	11	(24)	11	(24)	18	(40)	5	(11)	58	15	(26)	6	(10)	25	(43)	12	(21)
Nepal	43	12	(28)	21	(49)	8	(19)	2	(5)	56	9	(16)	10	(18)	28	(50)	9	(16)
Brazil	42	6	(14)	15	(36)	15	(36)	6	(14)	46	1	(2)	4	(9)	19	(41)	22	(48)
Cuba	42	2	(5)	3	(7)	33	(79)	4	(10)	35	1	(3)	3	(9)	16	(46)	15	(43)
Russia	42	6	(14)	8	(19)	24	(57)	4	(10)	33	0	(0)	0	(0)	20	(61)	13	(39)
Bangladesh	41	4	(10)	10	(24)	22	(54)	5	(12)	33	1	(3)	2	(6)	17	(52)	13	(39)
Burma	40	8	(20)	19	(48)	12	(30)	1	(3)	33	7	(21)	6	(18)	12	(36)	8	(24)
Liberia	39	15	(38)	13	(33)	6	(15)	5	(13)	31	7	(23)	11	(35)	5	(16)	8	(26)
Taiwan	38	3	(8)	5	(13)	28	(74)	2	(5)	29	6	(21)	6	(21)	6	(21)	11	(38)
All Others <sup>5</sup>	885	139	(16)	182	(21)	470	(53)	94	(11)	784	152	(19)	91	(12)	249	(32)	292	(37)
Total	7597	1397	(18)	1593	(21)	3820	(50)	787	(10)	7412	1301	(18)	1196	(16)	2650	(36)	2265	(31)

<sup>1</sup>Includes persons ≥15 years of age.

<sup>2</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>3</sup>Ranked by total case count.

<sup>4</sup>Among foreign-born persons, the number of years since arrival in the United States before diagnosis with tuberculosis.

<sup>5</sup>Includes Not Specified for Country of Origin. Excludes missing.

**Note:** Data for all years updated through April 6, 2007.

**Table 8. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2006**

Year	Total Cases	Verification Criterion <sup>1</sup>								Site of Disease <sup>4</sup>			
		Positive Culture		Positive Smear		Clinical Case Definition		Provider Diagnosis		Pulmonary <sup>2</sup>		Extra-pulmonary <sup>3</sup>	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	25107	20307	(81)	185	(1)	3085	(12)	1530	(6)	21158	(84)	3940	(16)
1994	24205	19506	(81)	189	(1)	2899	(12)	1611	(7)	20318	(84)	3885	(16)
1995	22728	18267	(80)	189	(1)	2727	(12)	1545	(7)	18888	(83)	3835	(17)
1996	21210	17154	(81)	131	(1)	2599	(12)	1326	(6)	17387	(82)	3814	(18)
1997	19751	15979	(81)	155	(1)	2405	(12)	1212	(6)	16239	(82)	3509	(18)
1998	18287	14790	(81)	155	(1)	2252	(12)	1090	(6)	14801	(81)	3484	(19)
1999	17501	13995	(80)	172	(1)	2101	(12)	1233	(7)	14067	(80)	3431	(20)
2000	16310	13014	(80)	148	(1)	1950	(12)	1198	(7)	13087	(80)	3211	(20)
2001	15945	12749	(80)	123	(1)	1887	(12)	1186	(7)	12723	(80)	3218	(20)
2002	15056	11976	(80)	104	(1)	1819	(12)	1157	(8)	11901	(79)	3148	(21)
2003	14838	11683	(79)	115	(1)	1782	(12)	1258	(8)	11809	(80)	3019	(20)
2004	14502	11328	(78)	79	(1)	1825	(13)	1270	(9)	11527	(80)	2971	(20)
2005	14080	10945	(78)	107	(1)	1774	(13)	1254	(9)	11141	(79)	2939	(21)
2006	13779	10783	(78)	101	(1)	1596	(12)	1299	(9)	10883	(79)	2889	(21)

<sup>1</sup>Based on the public health surveillance case definition for tuberculosis: CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(No. RR-10):40–41. See Appendix A.

<sup>2</sup>Includes cases among persons with both pulmonary and extrapulmonary disease and cases of miliary TB.

<sup>3</sup>Includes cases among persons with extrapulmonary TB disease only.

<sup>4</sup>Excludes missing and unknowns.

**Note:** See Technical Notes (page 9) for a description of national TB surveillance.

Data for all years updated through April 6, 2007.

**Table 9. Pulmonary Tuberculosis Cases and Percentages by Sputum Smear and Sputum Culture Results: United States, 1993–2006**

Year	Total Pulmonary Cases <sup>1</sup>	Sputum Smear Result						Sputum Culture Result					
		Positive		Negative		Not Done or Unknown		Positive		Negative		Not Done or Unknown	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	21158	9429	(45)	7915	(37)	3814	(18)	14878	(70)	2814	(13)	3466	(16)
1994	20318	8964	(44)	7914	(39)	3440	(17)	14210	(70)	2807	(14)	3301	(16)
1995	18888	8093	(43)	7713	(41)	3082	(16)	13282	(70)	2626	(14)	2980	(16)
1996	17387	7454	(43)	7352	(42)	2581	(15)	12270	(71)	2559	(15)	2558	(15)
1997	16239	6935	(43)	6916	(43)	2388	(15)	11568	(71)	2259	(14)	2412	(15)
1998	14801	6624	(45)	6038	(41)	2139	(14)	10486	(71)	2138	(14)	2177	(15)
1999	14067	6275	(45)	5662	(40)	2130	(15)	9820	(70)	2097	(15)	2150	(15)
2000	13087	5883	(45)	5347	(41)	1857	(14)	9251	(71)	1948	(15)	1888	(14)
2001	12723	5650	(44)	5322	(42)	1751	(14)	8902	(70)	2011	(16)	1810	(14)
2002	11901	5439	(46)	4792	(40)	1670	(14)	8329	(70)	1837	(15)	1735	(15)
2003	11809	5368	(45)	4879	(41)	1562	(13)	8207	(69)	1978	(17)	1624	(14)
2004	11527	5277	(46)	4891	(42)	1359	(12)	8048	(70)	2042	(18)	1437	(12)
2005	11141	5111	(46)	4739	(43)	1291	(12)	7689	(69)	2052	(18)	1400	(13)
2006	10883	5091	(47)	4564	(42)	1228	(11)	7642	(70)	1881	(17)	1360	(12)

<sup>1</sup>Includes cases among persons with both pulmonary and extrapulmonary disease and cases of miliary TB.

**Note:** Data for all years updated through April 6, 2007.



**Table 10. Tuberculosis Cases and Percentages, by Resistance to INH or Multidrug Resistance<sup>1</sup> in Persons with No Previous History of TB, by Origin of Birth: United States, 1993–2006**

Year	Resistance to Isoniazid <sup>2</sup>						Resistance to Isoniazid and Rifampin <sup>2</sup>					
	Total Cases <sup>3,4</sup>		U.S.-born		Foreign-born <sup>5,6</sup>		Total Cases <sup>3,4</sup>		U.S.-born		Foreign-born <sup>5,6</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	1399	(8.4)	804	(6.8)	579	(12.3)	407	(2.4)	301	(2.5)	103	(2.2)
1994	1360	(8.3)	711	(6.4)	635	(12.0)	353	(2.1)	238	(2.2)	110	(2.1)
1995	1174	(7.3)	555	(5.4)	618	(10.9)	254	(1.6)	169	(1.6)	85	(1.5)
1996	1136	(7.4)	494	(5.1)	639	(11.3)	206	(1.3)	104	(1.1)	101	(1.8)
1997	1079	(7.4)	435	(5.0)	640	(11.2)	155	(1.1)	76	(0.9)	79	(1.4)
1998	1013	(7.5)	367	(4.7)	644	(11.3)	132	(1.0)	55	(0.7)	76	(1.3)
1999	899	(7.0)	283	(4.0)	614	(10.9)	127	(1.0)	39	(0.6)	88	(1.6)
2000	892	(7.5)	268	(4.3)	621	(10.9)	121	(1.0)	38	(0.6)	83	(1.5)
2001	805	(7.0)	243	(4.3)	561	(9.5)	116	(1.0)	34	(0.6)	82	(1.4)
2002	821	(7.6)	206	(4.1)	614	(10.8)	126	(1.2)	36	(0.7)	90	(1.6)
2003	821	(7.7)	215	(4.5)	603	(10.3)	91	(0.9)	24	(0.5)	67	(1.1)
2004	802	(7.6)	214	(4.5)	588	(10.2)	103	(1.0)	27	(0.6)	76	(1.3)
2005	756	(7.5)	186	(4.2)	565	(10.0)	98	(1.0)	19	(0.4)	78	(1.4)
2006	752	(7.7)	173	(4.3)	577	(10.2)	91	(0.9)	18	(0.4)	73	(1.3)

<sup>1</sup>Resistance to at least isoniazid and rifampin

<sup>2</sup>Isolates may be resistant to other drugs.

<sup>3</sup>All cases were culture positive, and initial drug susceptibility testing done.

<sup>4</sup>Includes persons of unknown country of birth.

<sup>5</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>6</sup>Includes Not Specified for Country of Origin. Excludes missing.

**Note:** Data for all years updated through April 6, 2007.

Percentages are of total cases for given year with no previous history of TB, culture positive, and initial drug susceptibility testing done (total cases not shown). More than 95% of all persons in each group had drug-susceptibility test results reported for an initial isolate. See Surveillance Slides #19 through #22.

**Table 11. Tuberculosis Cases and Percentages, by Resistance to INH or Multidrug Resistance<sup>1</sup> in Persons with Previous History of TB, by Origin of Birth: United States, 1993–2006**

Year	Resistance to Isoniazid <sup>2</sup>						Resistance to Isoniazid and Rifampin <sup>2</sup>					
	Total Cases <sup>3,4</sup>		U.S.-born		Foreign-born <sup>5,6</sup>		Total Cases <sup>3,4</sup>		U.S.-born		Foreign-born <sup>5,6</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	164	(16.5)	85	(12.6)	76	(24.8)	75	(7.6)	30	(4.5)	45	(14.7)
1994	176	(17.0)	81	(11.6)	94	(27.9)	74	(7.1)	35	(5.0)	38	(11.3)
1995	168	(17.5)	77	(12.9)	91	(25.1)	70	(7.3)	28	(4.7)	42	(11.6)
1996	142	(16.4)	67	(12.0)	74	(24.3)	43	(5.0)	20	(3.6)	22	(7.2)
1997	109	(14.7)	35	(7.7)	74	(25.8)	44	(5.9)	12	(2.6)	32	(11.1)
1998	98	(13.0)	38	(7.8)	60	(22.7)	23	(3.1)	6	(1.2)	17	(6.4)
1999	82	(12.2)	25	(6.5)	55	(19.3)	28	(4.2)	6	(1.6)	22	(7.7)
2000	82	(12.9)	22	(6.0)	60	(22.1)	24	(3.8)	2	(0.5)	22	(8.1)
2001	85	(13.5)	28	(8.6)	57	(18.9)	31	(4.9)	7	(2.2)	24	(8.0)
2002	79	(13.9)	23	(7.6)	56	(21.3)	25	(4.4)	3	(1.0)	22	(8.4)
2003	65	(12.4)	16	(6.3)	49	(18.0)	20	(3.8)	2	(0.8)	18	(6.6)
2004	62	(11.6)	15	(5.5)	47	(18.0)	25	(4.7)	4	(1.5)	21	(8.0)
2005	73	(14.5)	20	(8.4)	53	(19.9)	23	(4.6)	2	(0.8)	21	(7.9)
2006	64	(13.6)	9	(4.6)	55	(19.9)	20	(4.2)	2	(1.0)	18	(6.5)

<sup>1</sup>Resistance to at least isoniazid and rifampin

<sup>2</sup>Isolates may be resistant to other drugs.

<sup>3</sup>All cases were culture positive, and initial drug susceptibility testing done.

<sup>4</sup>Includes persons of unknown country of birth.

<sup>5</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>6</sup>Includes Not Specified for Country of Origin. Excludes missing.

**Note:** Data for all years updated through April 6, 2007.

Percentages are of total cases for given year with previous history of TB, culture positive, and initial drug susceptibility testing done (total cases not shown). More than 95% of all persons in each group had drug-susceptibility test results reported for an initial isolate.

**Table 12. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2006**

Year	Initial Drug Regimen <sup>1,2</sup>				Directly Observed Therapy <sup>3</sup>		Therapy ≤1 Year Indicated <sup>4</sup>	
	I R	IRZ	IRZ, E/S	IRZE	DOT Only	Both DOT and Self-Administered	COT ≤1 Year	COT
1993	(12.9)	(31.2)	(40.9)	(40.3)	(21.3)	(14.1)	(64.1)	(87.5)
1994	(7.0)	(23.3)	(56.3)	(55.7)	(26.8)	(19.6)	(69.0)	(87.9)
1995	(5.2)	(20.3)	(63.4)	(62.7)	(36.1)	(20.8)	(73.9)	(89.6)
1996	(4.2)	(17.5)	(67.9)	(67.3)	(41.5)	(21.9)	(76.4)	(90.5)
1997	(3.2)	(15.1)	(72.4)	(71.9)	(45.9)	(23.3)	(78.2)	(91.3)
1998	(2.6)	(12.9)	(74.7)	(74.3)	(46.8)	(26.1)	(80.6)	(92.5)
1999	(2.2)	(11.2)	(77.2)	(76.9)	(48.5)	(27.1)	(80.8)	(92.3)
2000	(2.0)	(10.4)	(78.6)	(78.5)	(51.8)	(25.5)	(81.5)	(92.6)
2001	(1.7)	(9.6)	(80.2)	(79.8)	(52.6)	(27.0)	(81.5)	(92.5)
2002	(1.8)	(8.9)	(80.5)	(80.3)	(54.4)	(27.3)	(82.1)	(92.3)
2003	(1.4)	(8.1)	(81.4)	(81.3)	(55.8)	(28.0)	(82.7)	(92.6)
2004	(1.5)	(6.3)	(82.5)	(82.4)	(57.2)	(26.7)	(82.3)	(91.0)
2005	(1.2)	(5.5)	(83.6)	(83.6)	...	...	...	...
2006	(1.2)	(4.8)	(83.0)	(82.9)	...	...	...	...

<sup>1</sup>Includes persons alive at diagnosis.

<sup>2</sup>I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin. Excludes cases with no information on initial drug regimen; 3% received no initial drug therapy, less than 1% were started on one drug, and approximately 10% had an initial multidrug regimen other than IR, IRZ, or IRZ,E/S.

<sup>3</sup>Includes persons alive at diagnosis with initial drug regimen of one or more drugs prescribed.

<sup>4</sup>Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate resistant to rifampin and pediatric (aged <15) cases with meningeal, bone or joint, or miliary disease. See Technical Notes (page 9) for description of COT calculation.

**Note:** Ellipses indicate data not available.

Data for all years updated through April 6, 2007.

See Surveillance Slides #25 and #26.

**Table 13. Tuberculosis Cases and Percentages in Persons with HIV Test Results<sup>1</sup> and with HIV Coinfection by Age Group: United States, 1993–2005**

Year	25–44 Years Old				All Ages			
	HIV Test Results		HIV Positive		HIV Test Results		HIV Positive	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	4375	(46)	2788	(29)	7454	(30)	3681	(15)
1994	4442	(49)	2667	(29)	7883	(33)	3599	(15)
1995	4277	(52)	2172	(26)	8179	(36)	3038	(13)
1996	4366	(58)	1856	(25)	8832	(42)	2615	(12)
1997	4142	(60)	1473	(21)	8771	(44)	2092	(11)
1998	3861	(61)	1240	(20)	8291	(45)	1831	(10)
1999	3811	(63)	1175	(19)	8420	(48)	1726	(10)
2000	3524	(63)	955	(17)	8111	(50)	1464	(9)
2001	3566	(64)	911	(16)	8037	(50)	1407	(9)
2002	3486	(66)	845	(16)	7941	(53)	1389	(9)
2003	3422	(67)	807	(16)	8104	(55)	1320	(9)
2004	3342	(68)	681	(14)	8226	(57)	1188	(8)
2005	3192	(67)	606	(13)	7992	(57)	1035	(7)

<sup>1</sup>Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS. In California, the number of patients testing negative, indeterminate, refusing testing, not offered testing, test performed but status unknown, unknown, or missing HIV data is not reported to CDC. California did not report AIDS test results for 2005. Rhode Island did not report HIV test results for years 1993–1997.

**Note:** Data for all years updated through April 6, 2007.

See Surveillance Slides #23 and #24.



**Table 14. Tuberculosis (TB) Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2004**

Year	Total Cases <sup>1</sup>	Completed Therapy		Moved		Lost		Refused		Died <sup>2</sup>		Unknown <sup>3</sup>	
	No.	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
1993	23741	18041	(76.0)	1121	(4.7)	1086	(4.6)	223	(0.9)	3052	(12.9)	218	(0.9)
1994	23051	17761	(77.1)	1194	(5.2)	739	(3.2)	183	(0.8)	2743	(11.9)	431	(1.9)
1995	21712	17286	(79.6)	970	(4.5)	563	(2.6)	155	(0.7)	2390	(11.0)	348	(1.6)
1996	20297	16510	(81.3)	783	(3.9)	520	(2.6)	156	(0.8)	1992	(9.8)	336	(1.7)
1997	18930	15654	(82.7)	667	(3.5)	435	(2.3)	119	(0.6)	1755	(9.3)	300	(1.6)
1998	17584	14762	(84.0)	534	(3.0)	400	(2.3)	104	(0.6)	1578	(9.0)	206	(1.2)
1999	16863	14218	(84.3)	456	(2.7)	356	(2.1)	104	(0.6)	1436	(8.5)	293	(1.7)
2000	15786	13395	(84.9)	411	(2.6)	391	(2.5)	112	(0.7)	1295	(8.2)	182	(1.2)
2001	15409	13195	(85.6)	374	(2.4)	364	(2.4)	97	(0.6)	1115	(7.2)	264	(1.7)
2002	14558	12427	(85.4)	336	(2.3)	364	(2.5)	86	(0.6)	1071	(7.4)	274	(1.9)
2003	14381	12376	(86.1)	315	(2.2)	356	(2.5)	84	(0.6)	986	(6.9)	264	(1.8)
2004	14078	11910	(84.6)	348	(2.5)	322	(2.3)	79	(0.6)	941	(6.7)	478	(3.4)

<sup>1</sup>Includes all cases in persons reported as alive at diagnosis and taking one or more TB drugs.

<sup>2</sup>Died = died of any cause (not only TB).

<sup>3</sup>Includes cases in persons reporting reason therapy stopped = Other, Missing, or Unknown.

**Note:** Data for all years are updated through April 6, 2007.

Data complete through 2004 only. See Technical Notes (page 9) for details.

# **Morbidity Tables United States, 2006**



**Table 15. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2006**

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	13,779	485	322	1,540	4,702	4,053	2,676	1
Male	8,548	247	171	869	2,798	2,827	1,635	1
Female	5,227	238	151	671	1,902	1,225	1,040	0
Unknown	4	0	0	0	2	1	1	0
Hispanic or Latino <sup>1</sup>	4,066	260	128	681	1,580	925	492	0
Male	2,684	138	65	442	1,089	651	299	0
Female	1,381	122	63	239	491	274	192	0
Unknown	1	0	0	0	0	0	1	0
Non-Hispanic								
American Indian or Alaska Native	167	4	5	11	55	64	28	0
Male	94	2	3	4	32	39	14	0
Female	73	2	2	7	23	25	14	0
Unknown	0	0	0	0	0	0	0	0
Asian	3,298	45	39	320	1,200	934	759	1
Male	1,812	22	20	147	568	579	475	1
Female	1,483	23	19	173	630	354	284	0
Unknown	3	0	0	0	2	1	0	0
Black or African American	3,737	132	120	413	1,300	1,263	509	0
Male	2,312	62	63	211	767	906	303	0
Female	1,425	70	57	202	533	357	206	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	56	1	4	12	22	12	5	0
Male	30	0	2	4	15	7	2	0
Female	26	1	2	8	7	5	3	0
Unknown	0	0	0	0	0	0	0	0
White	2,403	42	25	99	530	838	869	0
Male	1,580	22	18	58	316	634	532	0
Female	823	20	7	41	214	204	337	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>2</sup>	35	1	1	2	9	15	7	0
Male	21	1	0	1	6	9	4	0
Female	14	0	1	1	3	6	3	0
Unknown	0	0	0	0	0	0	0	0
Unknown	17	0	0	2	6	2	7	0
Male	15	0	0	2	5	2	6	0
Female	2	0	0	0	1	0	1	0
Unknown	0	0	0	0	0	0	0	0

<sup>1</sup>Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9).

See Surveillance Slides #6 and #9.

**Table 16. Tuberculosis Case Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2006**

Race/Ethnicity and Sex	Age Group						
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65
<b>Total Rate</b>	4.6	2.4	0.8	3.6	5.6	5.4	7.2
Male	5.8	2.4	0.8	4.0	6.6	7.7	10.4
Female	3.4	2.4	0.8	3.3	4.6	3.2	4.8
Hispanic or Latino <sup>1</sup>	9.2	5.5	1.6	9.2	10.7	13.1	20.5
Male	11.7	5.7	1.6	11.3	13.6	18.6	29.3
Female	6.5	5.3	1.6	6.9	7.3	7.7	13.9
American Indian or Alaska Native	7.4	2.3	1.4	2.7	8.6	12.6	16.0
Male	8.4	2.2	1.6	1.9	10.1	16.1	18.2
Female	6.4	2.3	1.1	3.5	7.2	9.5	14.3
Asian	25.6	5.2	2.5	19.1	26.1	30.9	65.2
Male	29.0	5.0	2.5	17.1	25.3	41.2	95.0
Female	22.3	5.5	2.5	21.2	26.8	22.0	42.7
Black/African American	10.2	4.5	2.0	6.7	12.3	15.7	16.5
Male	13.2	4.2	2.1	6.8	15.2	24.8	25.6
Female	7.4	4.9	2.0	6.6	9.6	8.2	10.8
Native Hawaiian or Pacific Islander	13.6	3.6	6.4	17.0	16.1	13.9	17.5
Male	14.4	0.0	6.2	11.0	21.6	16.4	15.5
Female	12.7	7.6	6.5	23.4	10.4	11.5	19.1
White	1.2	0.4	0.1	0.4	1.0	1.5	2.9
Male	1.6	0.4	0.1	0.4	1.2	2.3	4.2
Female	0.8	0.4	0.1	0.3	0.8	0.7	1.9
Multiple Race <sup>2</sup>	0.9	0.2	0.1	0.3	1.0	2.5	3.2
Male	1.0	0.3	0.0	0.3	1.3	3.1	4.3
Female	0.7	0.0	0.2	0.3	0.6	1.9	2.4

<sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

**Note:** Denominators for computing case rates were obtained from the U.S. Census Bureau Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin: July 1, 2006 (<http://www.census.gov/popest/national/asrh/files/NC-EST2006-ALLDATA-R-File14.dat>) (Accessed May 21, 2007).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9).

See Surveillance Slide #10.

**Table 17. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2006**

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
Total Cases	5,934	412	194	438	1,442	2,079	1,369	0
Male	3,865	207	104	243	911	1,544	856	0
Female	2,069	205	90	195	531	535	513	0
Unknown	0	0	0	0	0	0	0	0
Hispanic or Latino <sup>1</sup>	992	224	84	133	207	207	137	0
Male	614	116	42	82	138	149	87	0
Female	378	108	42	51	69	58	50	0
Unknown	0	0	0	0	0	0	0	0
Non-Hispanic								
American Indian or Alaska Native	163	4	5	9	54	63	28	0
Male	91	2	3	2	31	39	14	0
Female	72	2	2	7	23	24	14	0
Unknown	0	0	0	0	0	0	0	0
Asian	135	32	14	34	27	14	14	0
Male	74	15	10	15	13	10	11	0
Female	61	17	4	19	14	4	3	0
Unknown	0	0	0	0	0	0	0	0
Black or African American	2,606	115	70	178	739	1,053	451	0
Male	1,706	54	35	100	467	772	278	0
Female	900	61	35	78	272	281	173	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	41	1	4	12	12	7	5	0
Male	19	0	2	4	7	4	2	0
Female	22	1	2	8	5	3	3	0
Unknown	0	0	0	0	0	0	0	0
White	1,976	35	16	70	399	728	728	0
Male	1,348	19	12	39	253	565	460	0
Female	628	16	4	31	146	163	268	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>2</sup>	12	1	1	1	2	6	1	0
Male	6	1	0	0	1	4	0	0
Female	6	0	1	1	1	2	1	0
Unknown	0	0	0	0	0	0	0	0
Unknown	9	0	0	1	2	1	5	0
Male	7	0	0	1	1	1	4	0
Female	2	0	0	0	1	0	1	0
Unknown	0	0	0	0	0	0	0	0

<sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person. Category first reported in 2003.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9).

See Surveillance Slide #13.

**Table 18. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2006**

Race/Ethnicity and Sex	Age Group							Not Stated
	All Ages	Under 5	5–14	15–24	25–44	45–64	≥65	
<b>Total Cases</b>	<b>7,799</b>	<b>73</b>	<b>128</b>	<b>1,095</b>	<b>3,244</b>	<b>1,956</b>	<b>1,302</b>	<b>1</b>
Male	4,648	40	67	623	1,875	1,268	774	1
Female	3,147	33	61	472	1,367	687	527	0
Unknown	4	0	0	0	2	1	1	0
Hispanic or Latino <sup>2</sup>	3,048	36	44	543	1,366	708	351	0
Male	2,049	22	23	358	945	493	208	0
Female	998	14	21	185	421	215	142	0
Unknown	1	0	0	0	0	0	1	0
Non-Hispanic								
American Indian or Alaska Native	4	0	0	2	1	1	0	0
Male	3	0	0	2	1	0	0	0
Female	1	0	0	0	0	1	0	0
Unknown	0	0	0	0	0	0	0	0
Asian	3,157	13	25	286	1,171	917	744	1
Male	1,733	7	10	132	554	566	463	1
Female	1,421	6	15	154	615	350	281	0
Unknown	3	0	0	0	2	1	0	0
Black or African American	1,123	17	50	234	556	208	58	0
Male	602	8	28	111	297	133	25	0
Female	521	9	22	123	259	75	33	0
Unknown	0	0	0	0	0	0	0	0
Native Hawaiian or Other Pacific Islander	15	0	0	0	10	5	0	0
Male	11	0	0	0	8	3	0	0
Female	4	0	0	0	2	2	0	0
Unknown	0	0	0	0	0	0	0	0
White	423	7	9	29	130	107	141	0
Male	229	3	6	19	62	67	72	0
Female	194	4	3	10	68	40	69	0
Unknown	0	0	0	0	0	0	0	0
Multiple Race <sup>3</sup>	23	0	0	1	7	9	6	0
Male	15	0	0	1	5	5	4	0
Female	8	0	0	0	2	4	2	0
Unknown	0	0	0	0	0	0	0	0
Unknown	6	0	0	0	3	1	2	0
Male	6	0	0	0	3	1	2	0
Female	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>2</sup>Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>3</sup>Indicates two or more races reported for a person. Category first reported in 2003.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9). See Surveillance Slide #13.

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**Table 19. Tuberculosis Cases by Country of Origin<sup>1</sup>: United States, 2006**

<b>African Region</b>					
<b>Total Cases=594</b>					
Algeria	5	Ethiopia	201	Niger	4
Angola	3	Gabon	2	Nigeria	37
Benin	1	Gambia	11	Rwanda	3
Botswana	1	Ghana	23	Sao Tome and Principe	0
Burkina Faso	2	Guinea	10	Senegal	10
Burundi	1	Guinea-Bissau	2	Seychelles	1
Cameroon	19	Kenya	73	Sierra Leone	17
Cape Verde	11	Lesotho	0	South Africa	21
Central African Republic	1	Liberia	52	Swaziland	0
Chad	1	Madagascar	0	Tanzania, UR	3
Comoros	0	Malawi	4	Togo	4
Congo, Republic of	10	Mali	6	Uganda	13
Côte d'Ivoire	10	Mauritania	2	Zambia	9
DR Congo	2	Mauritius	0	Zimbabwe	13
Equatorial Guinea	2	Mozambique	2		
Eritrea	1	Namibia	1		

<b>Americas Region</b>					
<b>Total Cases=9,278</b>					
Anguilla	0	Cuba	42	Panama	9
Antigua and Barbuda	2	Dominica	1	Paraguay	1
Argentina	6	Dominican Republic	112	Peru	159
Bahamas	0	Ecuador	117	Puerto Rico	85
Barbados	3	El Salvador	145	St. Kitts and Nevis	2
Belize	4	Grenada	2	St. Lucia	1
Bermuda	0	Guatemala	226	St. Vincent & Grenadines	1
Bolivia	22	Guyana	31	Suriname	0
Brazil	42	Haiti	211	Trinidad and Tobago	21
British Virgin Islands	0	Honduras	163	Turks and Caicos Islands	0
Canada	5	Jamaica	29	Uruguay	5
Cayman Islands	1	Mexico	1929	U.S. Virgin Islands	1
Chile	3	Montserrat	2	United States of America	5807
Colombia	45	Netherland Antilles	0	Venezuela	10
Costa Rica	6	Nicaragua	27		

<b>Eastern Mediterranean Region</b>					
<b>Total Cases=395</b>					
Afghanistan	15	Lebanon	1	Sudan	34
Bahrain	0	Libyan Arab Jamahiriya	1	Syrian Arab Republic	3
Djibouti	1	Morocco	8	Tunisia	1
Egypt	3	Oman	0	United Arab Emirates	0
Iran, Islamic Republic of	24	Pakistan	80	West Bank and Gaza	0
Iraq	8	Qatar	0	Yemen	10
Jordan	5	Saudi Arabia	3		
Kuwait	2	Somalia	196		

**Table 19. (Cont'd) Tuberculosis Cases by Country of Origin<sup>1</sup>: United States, 2006**

<b>European Region</b>					
<b>Total Cases=271</b>					
Albania	5	Germany	11	Norway	0
Andorra	0	Greece	5	Poland	28
Armenia	10	Hungary	1	Portugal	9
Austria	3	Iceland	1	Romania	20
Azerbaijan	1	Ireland	6	Russian Federation	47
Belarus	0	Israel	1	San Marino	0
Belguim	0	Italy	12	Serbia	4
Bosnia and Herzegovina	21	Kazakhstan	2	Slovakia	0
Bulgaria	3	Kyrgyzstan	0	Slovenia	0
Croatia	3	Latvia	1	Spain	2
Cyprus	0	Lithuania	1	Sweden	0
Czech Republic	2	Luxembourg	0	Switzerland	0
Czechoslovakia	4	Macedonia, TFYR	2	Tajikistan	0
Denmark	0	Malta	0	Turkey	7
Estonia	2	Moldova, Republic of	3	Turkmenistan	1
Finland	0	Monaco	0	Ukraine	14
France	4	Montenegro	0	United Kingdom	11
Georgia	6	Netherlands	2	Uzbekistan	9
				Yugoslavia	7
<b>Southeast Asia Region</b>					
<b>Total Cases=798</b>					
Bangladesh	42	Korea, DPR	21	Sri Lanka	6
Bhutan	2	Maldives	0	Thailand	55
India	544	Myanmar	40	Timor-Leste	0
Indonesia	45	Nepal	43		
<b>Western Pacific Region</b>					
<b>Total Cases=2,354</b>					
American Samoa	4	Korea, Rep.	206	Philippines	861
Australia	2	Lao, PDR	60	Samoa	1
Brunei Darussalam	0	Malaysia	12	Singapore	0
Cambodia	99	Marshall Islands, Republic of	11	Solomon Islands	0
China	377	Micronesia, Federated States of	18	Tokelau	0
China, Hong Kong SAR	26	Mongolia	9	Tonga	2
China, Macao SAR	1	Nauru	0	Tuvalu	0
Cook Islands	0	New Caledonia	0	Vanuatu	0
Fiji	3	New Zealand	2	Vietnam	632
French Polynesia	0	Niue	0	Wallis and Futuna	0
Guam	6	N. Mariana Islands, Commonwealth of	0		
Japan	18	Palau, Republic of	2		
Kiribati	1	Papua New Guinea	1		
<b>Other<sup>2</sup></b>					
<b>Total Cases=43</b>					
<b>Unknown</b>					
<b>Total Cases=46</b>					

<sup>1</sup>Country as reported by patient.<sup>2</sup>Includes country codes currently reported via the National Tuberculosis Surveillance System that are not represented by WHO member states.**Note:** Regional composition of countries based on WHO 2006 Report *Global Tuberculosis Control, Surveillance, Planning, Financing, World Health Organization (WHO/HTM/TB/2006.362)* ([http://www.who.int/tb/publications/global\\_report/en/](http://www.who.int/tb/publications/global_report/en/)).

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# **Morbidity Tables**

## **States, 2006**



**Table 20. Tuberculosis Cases and Case Rates per 100,000 Population: States, 2006 and 2005**

State	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2006
	2006	2005	2006	2005	2006	2005	
<b>United States</b>	<b>13,779</b>	<b>14,080</b>	<b>4.6</b>	<b>4.7</b>	<b>--</b>	<b>--</b>	<b>299,398,484</b>
Alabama	196	216	4.3	4.7	16	13	4,599,030
Alaska	70	59	10.4	8.9	1	1	670,053
Arizona	315	281	5.1	4.7	10	14	6,166,318
Arkansas	102	115	3.6	4.1	24	19	2,810,872
California	2,779	2,901	7.6	8.0	3	3	36,457,549
Colorado	124	101	2.6	2.2	28	35	4,753,377
Connecticut	89	95	2.5	2.7	29	29	3,504,809
Delaware	29	27	3.4	3.2	25	26	853,476
District of Columbia <sup>1</sup>	72	55	12.4	9.4	--	--	581,530
Florida	1,038	1,093	5.7	6.2	7	6	18,089,888
Georgia	504	505	5.4	5.5	8	10	9,363,941
Hawaii	115	112	8.9	8.8	2	2	1,285,498
Idaho	20	23	1.4	1.6	42	41	1,466,465
Illinois	569	590	4.4	4.6	14	17	12,831,970
Indiana	125	146	2.0	2.3	36	32	6,313,520
Iowa	40	55	1.3	1.9	44	40	2,982,085
Kansas	82	60	3.0	2.2	26	34	2,764,075
Kentucky	84	124	2.0	3.0	35	27	4,206,074
Louisiana	207	257	4.8	5.7	11	8	4,287,768
Maine	16	17	1.2	1.3	48	44	1,321,574
Maryland	253	283	4.5	5.1	13	11	5,615,727
Massachusetts	259	265	4.0	4.1	21	20	6,437,193
Michigan	221	246	2.2	2.4	32	31	10,095,643
Minnesota	217	199	4.2	3.9	18	23	5,167,101
Mississippi	115	103	4.0	3.5	23	25	2,910,540
Missouri	104	108	1.8	1.9	38	39	5,842,713
Montana	13	10	1.4	1.1	41	47	944,632
Nebraska	25	35	1.4	2.0	40	38	1,768,331
Nevada	101	112	4.0	4.6	20	16	2,495,529
New Hampshire	17	4	1.3	0.3	46	49	1,314,895
New Jersey	508	482	5.8	5.5	6	9	8,724,560
New Mexico	48	39	2.5	2.0	30	37	1,954,599
New York	1,271	1,284	6.6	6.6	5	5	19,306,183
North Carolina	374	329	4.2	3.8	17	24	8,856,505
North Dakota	9	6	1.4	0.9	39	48	635,867
Ohio	239	260	2.1	2.3	34	33	11,478,006
Oklahoma	144	144	4.0	4.1	22	21	3,579,212
Oregon	81	103	2.2	2.8	33	28	3,700,758
Pennsylvania	341	326	2.7	2.6	27	30	12,440,621
Rhode Island	26	47	2.4	4.4	31	18	1,067,610
South Carolina	222	261	5.1	6.1	9	7	4,321,249
South Dakota	14	16	1.8	2.1	37	36	781,919
Tennessee	279	299	4.6	5.0	12	12	6,038,803
Texas	1,585	1,535	6.7	6.7	4	4	23,507,783
Utah	34	29	1.3	1.2	45	46	2,550,063
Vermont	8	8	1.3	1.3	47	45	623,908
Virginia	332	355	4.3	4.7	15	15	7,642,884
Washington	262	254	4.1	4.0	19	22	6,395,798
West Virginia	22	28	1.2	1.5	49	42	1,818,470
Wisconsin	75	78	1.3	1.4	43	43	5,556,506
Wyoming	4	...	0.8	...	50	50	515,004
American Samoa <sup>1,2</sup>	...	5	...	8.6	--	--	57,794
Fed. States of Micronesia <sup>1,2</sup>	71	74	65.7	68.5	--	--	108,004
Guam <sup>1,2</sup>	53	64	31.0	38.0	--	--	171,019
Marshall Islands <sup>1,2</sup>	27	66	44.7	111.7	--	--	60,422
N. Mariana Islands <sup>1,2</sup>	35	56	42.4	69.7	--	--	82,459
Puerto Rico <sup>1,2</sup>	112	113	2.9	2.9	--	--	3,927,776
Republic of Palau <sup>1,2</sup>	5	10	24.3	49.3	--	--	20,579
U.S. Virgin Islands <sup>1,2</sup>	...	...	...	...	--	--	108,605

<sup>1</sup>Not ranked with the states. See Table 28, page 50, for District of Columbia ranking among states.

<sup>2</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Denominators for computing 2005 and 2006 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Population for the United States and States, and for Puerto Rico: April 1, 2000–July 1, 2006 (NST-EST2006-01) (accessed May 29, 2007) (<http://www.census.gov/popest/states/tables/NST-EST2006-01.xls>); for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/ipc/www/idbpyr.html>).

Ellipses indicate data not available.

See Surveillance Slide #4.

Table 21. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2006

States	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>13,779</b>	<b>485</b>	<b>(3.5)</b>	<b>322</b>	<b>(2.3)</b>	<b>1,540</b>	<b>(11.2)</b>	<b>4,702</b>	<b>(34.1)</b>	<b>4,053</b>	<b>(29.4)</b>	<b>2,676</b>	<b>(19.4)</b>	<b>1</b>	<b>(0.0)</b>
Alabama	196	5	(2.6)	0	(0.0)	17	(8.7)	62	(31.6)	64	(32.7)	48	(24.5)	0	(0.0)
Alaska	70	5	(7.1)	2	(2.9)	7	(10.0)	23	(32.9)	28	(40.0)	5	(7.1)	0	(0.0)
Arizona	315	25	(7.9)	16	(5.1)	31	(9.8)	106	(33.7)	82	(26.0)	55	(17.5)	0	(0.0)
Arkansas	102	3	(2.9)	4	(3.9)	8	(7.8)	25	(24.5)	37	(36.3)	25	(24.5)	0	(0.0)
California	2,779	91	(3.3)	42	(1.5)	319	(11.5)	859	(30.9)	792	(28.5)	676	(24.3)	0	(0.0)
Colorado	124	5	(4.0)	2	(1.6)	20	(16.1)	36	(29.0)	30	(24.2)	31	(25.0)	0	(0.0)
Connecticut	89	3	(3.4)	1	(1.1)	12	(13.5)	37	(41.6)	21	(23.6)	15	(16.9)	0	(0.0)
Delaware	29	2	(6.9)	0	(0.0)	7	(24.1)	6	(20.7)	9	(31.0)	5	(17.2)	0	(0.0)
District of Columbia	72	1	(1.4)	4	(5.6)	2	(2.8)	30	(41.7)	23	(31.9)	12	(16.7)	0	(0.0)
Florida	1,038	35	(3.4)	22	(2.1)	105	(10.1)	375	(36.1)	358	(34.5)	143	(13.8)	0	(0.0)
Georgia	504	28	(5.6)	10	(2.0)	68	(13.5)	194	(38.5)	147	(29.2)	56	(11.1)	1	(0.2)
Hawaii	115	0	(0.0)	2	(1.7)	16	(13.9)	33	(28.7)	35	(30.4)	29	(25.2)	0	(0.0)
Idaho	20	0	(0.0)	1	(5.0)	2	(10.0)	8	(40.0)	3	(15.0)	6	(30.0)	0	(0.0)
Illinois	569	29	(5.1)	15	(2.6)	52	(9.1)	175	(30.8)	182	(32.0)	116	(20.4)	0	(0.0)
Indiana	125	7	(5.6)	9	(7.2)	13	(10.4)	41	(32.8)	35	(28.0)	20	(16.0)	0	(0.0)
Iowa	40	0	(0.0)	0	(0.0)	9	(22.5)	15	(37.5)	10	(25.0)	6	(15.0)	0	(0.0)
Kansas	82	1	(1.2)	0	(0.0)	10	(12.2)	30	(36.6)	32	(39.0)	9	(11.0)	0	(0.0)
Kentucky	84	0	(0.0)	0	(0.0)	12	(14.3)	23	(27.4)	27	(32.1)	22	(26.2)	0	(0.0)
Louisiana	207	9	(4.3)	4	(1.9)	16	(7.7)	74	(35.7)	76	(36.7)	28	(13.5)	0	(0.0)
Maine	16	1	(6.3)	0	(0.0)	3	(18.8)	6	(37.5)	4	(25.0)	2	(12.5)	0	(0.0)
Maryland	253	6	(2.4)	2	(0.8)	28	(11.1)	99	(39.1)	68	(26.9)	50	(19.8)	0	(0.0)
Massachusetts	259	7	(2.7)	1	(0.4)	26	(10.0)	117	(45.2)	64	(24.7)	44	(17.0)	0	(0.0)
Michigan	221	6	(2.7)	4	(1.8)	21	(9.5)	59	(26.7)	68	(30.8)	63	(28.5)	0	(0.0)
Minnesota	217	7	(3.2)	17	(7.8)	54	(24.9)	75	(34.6)	35	(16.1)	29	(13.4)	0	(0.0)
Mississippi	115	3	(2.6)	5	(4.3)	7	(6.1)	30	(26.1)	42	(36.5)	28	(24.3)	0	(0.0)
Missouri	104	10	(9.6)	2	(1.9)	7	(6.7)	37	(35.6)	27	(26.0)	21	(20.2)	0	(0.0)
Montana	13	0	(0.0)	0	(0.0)	1	(7.7)	6	(46.2)	4	(30.8)	2	(15.4)	0	(0.0)
Nebraska	25	2	(8.0)	1	(4.0)	2	(8.0)	9	(36.0)	8	(32.0)	3	(12.0)	0	(0.0)
Nevada	101	2	(2.0)	2	(2.0)	9	(8.9)	32	(31.7)	46	(45.5)	10	(9.9)	0	(0.0)
New Hampshire	17	0	(0.0)	2	(11.8)	1	(5.9)	6	(35.3)	3	(17.6)	5	(29.4)	0	(0.0)
New Jersey	508	7	(1.4)	9	(1.8)	61	(12.0)	223	(43.9)	121	(23.8)	87	(17.1)	0	(0.0)

**Table 21. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2006**

States	Total Cases	Under 5		5–14		15–24		25–44		45–64		≥65		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New Mexico	48	0	(0.0)	2	(4.2)	1	(2.1)	11	(22.9)	18	(37.5)	16	(33.3)	0	(0.0)
New York	1,271	30	(2.4)	24	(1.9)	131	(10.3)	492	(38.7)	362	(28.5)	232	(18.3)	0	(0.0)
North Carolina	374	10	(2.7)	7	(1.9)	52	(13.9)	132	(35.3)	100	(26.7)	73	(19.5)	0	(0.0)
North Dakota	9	0	(0.0)	0	(0.0)	2	(22.2)	4	(44.4)	2	(22.2)	1	(11.1)	0	(0.0)
Ohio	239	7	(2.9)	9	(3.8)	36	(15.1)	81	(33.9)	45	(18.8)	61	(25.5)	0	(0.0)
Oklahoma	144	8	(5.6)	3	(2.1)	9	(6.3)	35	(24.3)	57	(39.6)	32	(22.2)	0	(0.0)
Oregon	81	0	(0.0)	4	(4.9)	11	(13.6)	26	(32.1)	20	(24.7)	20	(24.7)	0	(0.0)
Pennsylvania	341	15	(4.4)	19	(5.6)	26	(7.6)	99	(29.0)	97	(28.4)	85	(24.9)	0	(0.0)
Rhode Island	26	0	(0.0)	3	(11.5)	3	(11.5)	11	(42.3)	7	(26.9)	2	(7.7)	0	(0.0)
South Carolina	222	4	(1.8)	3	(1.4)	22	(9.9)	64	(28.8)	87	(39.2)	42	(18.9)	0	(0.0)
South Dakota	14	0	(0.0)	1	(7.1)	2	(14.3)	5	(35.7)	3	(21.4)	3	(21.4)	0	(0.0)
Tennessee	279	12	(4.3)	6	(2.2)	27	(9.7)	83	(29.7)	78	(28.0)	73	(26.2)	0	(0.0)
Texas	1,585	63	(4.0)	43	(2.7)	179	(11.3)	555	(35.0)	507	(32.0)	238	(15.0)	0	(0.0)
Utah	34	5	(14.7)	1	(2.9)	4	(11.8)	12	(35.3)	9	(26.5)	3	(8.8)	0	(0.0)
Vermont	8	0	(0.0)	0	(0.0)	3	(37.5)	1	(12.5)	2	(25.0)	2	(25.0)	0	(0.0)
Virginia	332	14	(4.2)	12	(3.6)	49	(14.8)	119	(35.8)	83	(25.0)	55	(16.6)	0	(0.0)
Washington	262	8	(3.1)	4	(1.5)	28	(10.7)	94	(35.9)	71	(27.1)	57	(21.8)	0	(0.0)
West Virginia	22	0	(0.0)	0	(0.0)	2	(9.1)	5	(22.7)	6	(27.3)	9	(40.9)	0	(0.0)
Wisconsin	75	9	(12.0)	2	(2.7)	7	(9.3)	21	(28.0)	16	(21.3)	20	(26.7)	0	(0.0)
Wyoming	4	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)	2	(50.0)	1	(25.0)	0	(0.0)
American Samoa <sup>1</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>1</sup>	71	7	(9.9)	10	(14.1)	25	(35.2)	14	(19.7)	14	(19.7)	1	(1.4)	0	(0.0)
Guam <sup>1</sup>	53	4	(7.5)	5	(9.4)	4	(7.5)	13	(24.5)	16	(30.2)	11	(20.8)	0	(0.0)
Marshall Islands <sup>1</sup>	27	2	(7.4)	1	(3.7)	9	(33.3)	4	(14.8)	11	(40.7)	0	(0.0)	0	(0.0)
N. Mariana Islands <sup>1</sup>	35	0	(0.0)	1	(2.9)	6	(17.1)	18	(51.4)	8	(22.9)	2	(5.7)	0	(0.0)
Puerto Rico <sup>1</sup>	112	4	(3.6)	4	(3.6)	8	(7.1)	31	(27.7)	40	(35.7)	25	(22.3)	0	(0.0)
Republic of Palau <sup>1</sup>	5	1	(20.0)	1	(20.0)	0	(0.0)	3	(60.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands <sup>1</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.



Table 22. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2006

States	Total Cases	Hispanic or Latino <sup>1</sup>		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race <sup>2</sup>		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>13,779</b>	<b>4,066</b>	<b>(29.5)</b>	<b>167</b>	<b>(1.2)</b>	<b>3,298</b>	<b>(23.9)</b>	<b>3,737</b>	<b>(27.1)</b>	<b>56</b>	<b>(0.4)</b>	<b>2,403</b>	<b>(17.4)</b>	<b>35</b>	<b>(0.3)</b>	<b>17</b>	<b>(0.1)</b>
Alabama	196	39	(19.9)	0	(0.0)	12	(6.1)	79	(40.3)	0	(0.0)	66	(33.7)	0	(0.0)	0	(0.0)
Alaska	70	1	(1.4)	50	(71.4)	11	(15.7)	2	(2.9)	0	(0.0)	5	(7.1)	1	(1.4)	0	(0.0)
Arizona	315	195	(61.9)	11	(3.5)	30	(9.5)	23	(7.3)	0	(0.0)	56	(17.8)	0	(0.0)	0	(0.0)
Arkansas	102	20	(19.6)	0	(0.0)	8	(7.8)	34	(33.3)	3	(2.9)	36	(35.3)	0	(0.0)	1	(1.0)
California	2,779	1,067	(38.4)	8	(0.3)	1,206	(43.4)	207	(7.4)	11	(0.4)	266	(9.6)	6	(0.2)	8	(0.3)
Colorado	124	61	(49.2)	0	(0.0)	27	(21.8)	21	(16.9)	0	(0.0)	14	(11.3)	1	(0.8)	0	(0.0)
Connecticut	89	18	(20.2)	0	(0.0)	23	(25.8)	26	(29.2)	0	(0.0)	22	(24.7)	0	(0.0)	0	(0.0)
Delaware	29	12	(41.4)	1	(3.4)	3	(10.3)	10	(34.5)	0	(0.0)	3	(10.3)	0	(0.0)	0	(0.0)
District of Columbia	72	9	(12.5)	0	(0.0)	3	(4.2)	56	(77.8)	0	(0.0)	3	(4.2)	1	(1.4)	0	(0.0)
Florida	1,038	294	(28.3)	1	(0.1)	79	(7.6)	416	(40.1)	3	(0.3)	242	(23.3)	3	(0.3)	0	(0.0)
Georgia	504	116	(23.0)	0	(0.0)	67	(13.3)	246	(48.8)	0	(0.0)	74	(14.7)	0	(0.0)	1	(0.2)
Hawaii	115	1	(0.9)	0	(0.0)	92	(80.0)	0	(0.0)	14	(12.2)	6	(5.2)	2	(1.7)	0	(0.0)
Idaho	20	6	(30.0)	1	(5.0)	3	(15.0)	0	(0.0)	1	(5.0)	9	(45.0)	0	(0.0)	0	(0.0)
Illinois	569	144	(25.3)	1	(0.2)	150	(26.4)	185	(32.5)	0	(0.0)	88	(15.5)	0	(0.0)	1	(0.2)
Indiana	125	31	(24.8)	1	(0.8)	16	(12.8)	33	(26.4)	0	(0.0)	44	(35.2)	0	(0.0)	0	(0.0)
Iowa	40	9	(22.5)	1	(2.5)	11	(27.5)	8	(20.0)	0	(0.0)	11	(27.5)	0	(0.0)	0	(0.0)
Kansas	82	24	(29.3)	0	(0.0)	18	(22.0)	13	(15.9)	0	(0.0)	26	(31.7)	1	(1.2)	0	(0.0)
Kentucky	84	8	(9.5)	0	(0.0)	4	(4.8)	15	(17.9)	2	(2.4)	55	(65.5)	0	(0.0)	0	(0.0)
Louisiana	207	11	(5.3)	1	(0.5)	15	(7.2)	120	(58.0)	0	(0.0)	60	(29.0)	0	(0.0)	0	(0.0)
Maine	16	0	(0.0)	0	(0.0)	2	(12.5)	9	(56.3)	0	(0.0)	5	(31.3)	0	(0.0)	0	(0.0)
Maryland	253	51	(20.2)	0	(0.0)	54	(21.3)	119	(47.0)	0	(0.0)	29	(11.5)	0	(0.0)	0	(0.0)
Massachusetts	259	49	(18.9)	0	(0.0)	83	(32.0)	70	(27.0)	1	(0.4)	55	(21.2)	1	(0.4)	0	(0.0)
Michigan	221	24	(10.9)	1	(0.5)	54	(24.4)	84	(38.0)	0	(0.0)	57	(25.8)	1	(0.5)	0	(0.0)
Minnesota	217	24	(11.1)	8	(3.7)	49	(22.6)	110	(50.7)	0	(0.0)	25	(11.5)	1	(0.5)	0	(0.0)
Mississippi	115	13	(11.3)	3	(2.6)	6	(5.2)	65	(56.5)	0	(0.0)	28	(24.3)	0	(0.0)	0	(0.0)
Missouri	104	19	(18.3)	0	(0.0)	20	(19.2)	29	(27.9)	0	(0.0)	36	(34.6)	0	(0.0)	0	(0.0)
Montana	13	0	(0.0)	4	(30.8)	3	(23.1)	2	(15.4)	0	(0.0)	3	(23.1)	0	(0.0)	1	(7.7)
Nebraska	25	9	(36.0)	2	(8.0)	4	(16.0)	3	(12.0)	0	(0.0)	3	(12.0)	4	(16.0)	0	(0.0)
Nevada	101	38	(37.6)	0	(0.0)	28	(27.7)	17	(16.8)	0	(0.0)	18	(17.8)	0	(0.0)	0	(0.0)
New Hampshire	17	1	(5.9)	0	(0.0)	5	(29.4)	4	(23.5)	0	(0.0)	7	(41.2)	0	(0.0)	0	(0.0)
New Jersey	508	169	(33.3)	0	(0.0)	154	(30.3)	112	(22.0)	0	(0.0)	73	(14.4)	0	(0.0)	0	(0.0)
New Mexico	48	30	(62.5)	12	(25.0)	3	(6.3)	0	(0.0)	0	(0.0)	3	(6.3)	0	(0.0)	0	(0.0)

**Table 22. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2006**

States	Total Cases	Hispanic or Latino <sup>1</sup>		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		Multiple Race <sup>2</sup>		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	1,271	378	(29.7)	0	(0.0)	366	(28.8)	362	(28.5)	3	(0.2)	158	(12.4)	2	(0.2)	2	(0.2)
North Carolina	374	75	(20.1)	8	(2.1)	55	(14.7)	162	(43.3)	0	(0.0)	73	(19.5)	1	(0.3)	0	(0.0)
North Dakota	9	2	(22.2)	2	(22.2)	2	(22.2)	1	(11.1)	0	(0.0)	2	(22.2)	0	(0.0)	0	(0.0)
Ohio	239	19	(7.9)	0	(0.0)	26	(10.9)	122	(51.0)	0	(0.0)	71	(29.7)	1	(0.4)	0	(0.0)
Oklahoma	144	24	(16.7)	21	(14.6)	20	(13.9)	21	(14.6)	0	(0.0)	57	(39.6)	1	(0.7)	0	(0.0)
Oregon	81	15	(18.5)	1	(1.2)	20	(24.7)	13	(16.0)	7	(8.6)	25	(30.9)	0	(0.0)	0	(0.0)
Pennsylvania	341	40	(11.7)	0	(0.0)	84	(24.6)	137	(40.2)	2	(0.6)	78	(22.9)	0	(0.0)	0	(0.0)
Rhode Island	26	13	(50.0)	0	(0.0)	5	(19.2)	5	(19.2)	0	(0.0)	3	(11.5)	0	(0.0)	0	(0.0)
South Carolina	222	25	(11.3)	1	(0.5)	12	(5.4)	140	(63.1)	1	(0.5)	43	(19.4)	0	(0.0)	0	(0.0)
South Dakota	14	0	(0.0)	6	(42.9)	3	(21.4)	4	(28.6)	0	(0.0)	1	(7.1)	0	(0.0)	0	(0.0)
Tennessee	279	34	(12.2)	0	(0.0)	20	(7.2)	127	(45.5)	2	(0.7)	95	(34.1)	1	(0.4)	0	(0.0)
Texas	1,585	787	(49.7)	7	(0.4)	195	(12.3)	352	(22.2)	0	(0.0)	238	(15.0)	6	(0.4)	0	(0.0)
Utah	34	13	(38.2)	1	(2.9)	6	(17.6)	6	(17.6)	3	(8.8)	5	(14.7)	0	(0.0)	0	(0.0)
Vermont	8	0	(0.0)	0	(0.0)	2	(25.0)	3	(37.5)	0	(0.0)	3	(37.5)	0	(0.0)	0	(0.0)
Virginia	332	81	(24.4)	0	(0.0)	106	(31.9)	113	(34.0)	0	(0.0)	32	(9.6)	0	(0.0)	0	(0.0)
Washington	262	41	(15.6)	11	(4.2)	114	(43.5)	36	(13.7)	3	(1.1)	55	(21.0)	1	(0.4)	1	(0.4)
West Virginia	22	2	(9.1)	0	(0.0)	2	(9.1)	1	(4.5)	0	(0.0)	16	(72.7)	0	(0.0)	1	(4.5)
Wisconsin	75	24	(32.0)	2	(2.7)	16	(21.3)	13	(17.3)	0	(0.0)	19	(25.3)	0	(0.0)	1	(1.3)
Wyoming	4	0	(0.0)	1	(25.0)	1	(25.0)	1	(25.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)
American Samoa <sup>2</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>2</sup>	71	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	69	(97.2)	0	(0.0)	0	(0.0)	2	(2.8)
Guam <sup>2</sup>	53	0	(0.0)	0	(0.0)	11	(20.8)	0	(0.0)	30	(56.6)	1	(1.9)	1	(1.9)	10	(18.9)
Marshall Islands <sup>2</sup>	27	1	(3.7)	0	(0.0)	0	(0.0)	0	(0.0)	24	(88.9)	0	(0.0)	0	(0.0)	2	(7.4)
N. Mariana Islands <sup>2</sup>	35	1	(2.9)	0	(0.0)	26	(74.3)	0	(0.0)	8	(22.9)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico <sup>2</sup>	112	112		0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Republic of Palau <sup>2</sup>	5	0	(0.0)	0	(0.0)	2	(40.0)	0	(0.0)	2	(40.0)	0	(0.0)	0	(0.0)	1	(20.0)
U.S. Virgin Islands <sup>2</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Persons of Hispanic origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9).

See Surveillance Slide #9.

**Table 23. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons: States, 2006**

States	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown Origin	
		No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>13,779</b>	<b>5,934</b>	<b>(43.1)</b>	<b>7,799</b>	<b>(56.6)</b>	<b>46</b>	<b>(0.3)</b>
Alabama	196	141	(71.9)	53	(27.0)	2	(1.0)
Alaska	70	59	(84.3)	11	(15.7)	0	(0.0)
Arizona	315	128	(40.6)	179	(56.8)	8	(2.5)
Arkansas	102	76	(74.5)	26	(25.5)	0	(0.0)
California	2,779	638	(23.0)	2,128	(76.6)	13	(0.5)
Colorado	124	41	(33.1)	83	(66.9)	0	(0.0)
Connecticut	89	36	(40.4)	53	(59.6)	0	(0.0)
Delaware	29	15	(51.7)	14	(48.3)	0	(0.0)
District of Columbia	72	48	(66.7)	24	(33.3)	0	(0.0)
Florida	1,038	567	(54.6)	471	(45.4)	0	(0.0)
Georgia	504	300	(59.5)	204	(40.5)	0	(0.0)
Hawaii	115	26	(22.6)	89	(77.4)	0	(0.0)
Idaho	20	10	(50.0)	10	(50.0)	0	(0.0)
Illinois	569	263	(46.2)	293	(51.5)	13	(2.3)
Indiana	125	74	(59.2)	51	(40.8)	0	(0.0)
Iowa	40	12	(30.0)	28	(70.0)	0	(0.0)
Kansas	82	32	(39.0)	50	(61.0)	0	(0.0)
Kentucky	84	67	(79.8)	17	(20.2)	0	(0.0)
Louisiana	207	180	(87.0)	27	(13.0)	0	(0.0)
Maine	16	7	(43.8)	9	(56.3)	0	(0.0)
Maryland	253	84	(33.2)	169	(66.8)	0	(0.0)
Massachusetts	259	60	(23.2)	198	(76.4)	1	(0.4)
Michigan	221	129	(58.4)	92	(41.6)	0	(0.0)
Minnesota	217	44	(20.3)	173	(79.7)	0	(0.0)
Mississippi	115	98	(85.2)	17	(14.8)	0	(0.0)
Missouri	104	54	(51.9)	50	(48.1)	0	(0.0)
Montana	13	7	(53.8)	6	(46.2)	0	(0.0)
Nebraska	25	5	(20.0)	20	(80.0)	0	(0.0)
Nevada	101	31	(30.7)	70	(69.3)	0	(0.0)
New Hampshire	17	5	(29.4)	12	(70.6)	0	(0.0)
New Jersey	508	132	(26.0)	376	(74.0)	0	(0.0)
New Mexico	48	25	(52.1)	23	(47.9)	0	(0.0)
New York	1,271	374	(29.4)	892	(70.2)	5	(0.4)
North Carolina	374	238	(63.6)	135	(36.1)	1	(0.3)
North Dakota	9	5	(55.6)	4	(44.4)	0	(0.0)
Ohio	239	134	(56.1)	104	(43.5)	1	(0.4)
Oklahoma	144	107	(74.3)	37	(25.7)	0	(0.0)
Oregon	81	33	(40.7)	48	(59.3)	0	(0.0)
Pennsylvania	341	173	(50.7)	168	(49.3)	0	(0.0)
Rhode Island	26	4	(15.4)	22	(84.6)	0	(0.0)
South Carolina	222	182	(82.0)	40	(18.0)	0	(0.0)
South Dakota	14	7	(50.0)	7	(50.0)	0	(0.0)
Tennessee	279	210	(75.3)	69	(24.7)	0	(0.0)
Texas	1,585	826	(52.1)	759	(47.9)	0	(0.0)
Utah	34	12	(35.3)	22	(64.7)	0	(0.0)
Vermont	8	4	(50.0)	4	(50.0)	0	(0.0)
Virginia	332	101	(30.4)	230	(69.3)	1	(0.3)
Washington	262	75	(28.6)	187	(71.4)	0	(0.0)
West Virginia	22	18	(81.8)	4	(18.2)	0	(0.0)
Wisconsin	75	35	(46.7)	39	(52.0)	1	(1.3)
Wyoming	4	2	(50.0)	2	(50.0)	0	(0.0)

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Surveillance Slide #14.

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Table 24. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Country of Origin: States, 2006

States		Total Cases		Country of Origin												Unknown or Missing						
				Mexico		Philippines		Viet Nam		India		China		Haiti				Rep. Korea		All Others <sup>2</sup>		
				No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)			No.	(%)	No.	(%)	
United States				7,799	1,929	(24.7)	861	(11.0)	632	(8.1)	544	(7.0)	377	(4.8)	211	(2.7)	206	(2.6)	3,034	(38.9)	5	(0.1)
Alabama				53	22	(41.5)	0	(0.0)	3	(5.7)	5	(9.4)	1	(1.9)	1	(1.9)	0	(0.0)	21	(39.6)	0	(0.0)
Alaska				11	0	(0.0)	6	(54.5)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	4	(36.4)	0	(0.0)
Arizona				179	118	(65.9)	11	(6.1)	8	(4.5)	2	(1.1)	0	(0.0)	1	(0.6)	0	(0.0)	39	(21.8)	0	(0.0)
Arkansas				26	14	(53.8)	2	(7.7)	2	(7.7)	0	(0.0)	1	(3.8)	0	(0.0)	0	(0.0)	7	(26.9)	0	(0.0)
California				2,128	670	(31.5)	427	(20.1)	269	(12.6)	108	(5.1)	130	(6.1)	1	(0.0)	77	(3.6)	446	(21.0)	0	(0.0)
Colorado				83	36	(43.4)	5	(6.0)	8	(9.6)	3	(3.6)	2	(2.4)	0	(0.0)	0	(0.0)	29	(34.9)	0	(0.0)
Connecticut				53	1	(1.9)	4	(7.5)	0	(0.0)	10	(18.9)	1	(1.9)	2	(3.8)	2	(3.8)	33	(62.3)	0	(0.0)
Delaware				14	7	(50.0)	1	(7.1)	0	(0.0)	1	(7.1)	0	(0.0)	1	(7.1)	1	(7.1)	3	(21.4)	0	(0.0)
District of Columbia				24	1	(4.2)	0	(0.0)	1	(4.2)	1	(4.2)	0	(0.0)	0	(0.0)	0	(0.0)	21	(87.5)	0	(0.0)
Florida				471	85	(18.0)	28	(5.9)	22	(4.7)	14	(3.0)	4	(0.8)	110		3	(0.6)	205	(43.5)	0	(0.0)
Georgia				204	56	(27.5)	5	(2.5)	15	(7.4)	24	(11.8)	5	(2.5)	8	(3.9)	2	(1.0)	85	(41.7)	4	(2.0)
Hawaii				89	1	(1.1)	64	(71.9)	6	(6.7)	0	(0.0)	5	(5.6)	0	(0.0)	5	(5.6)	8	(9.0)	0	(0.0)
Idaho				10	4	(40.0)	0	(0.0)	1	(10.0)	1	(10.0)	1	(10.0)	0	(0.0)	0	(0.0)	3	(30.0)	0	(0.0)
Illinois				293	82	(28.0)	39	(13.3)	10	(3.4)	54	(18.4)	15	(5.1)	1	(0.3)	9	(3.1)	83	(28.3)	0	(0.0)
Indiana				51	20	(39.2)	4	(7.8)	2	(3.9)	2	(3.9)	1	(2.0)	0	(0.0)	0	(0.0)	22	(43.1)	0	(0.0)
Iowa				28	6	(21.4)	0	(0.0)	3	(10.7)	2	(7.1)	0	(0.0)	0	(0.0)	2	(7.1)	15	(53.6)	0	(0.0)
Kansas				50	16	(32.0)	4	(8.0)	4	(8.0)	2	(4.0)	0	(0.0)	0	(0.0)	0	(0.0)	24	(48.0)	0	(0.0)
Kentucky				17	5	(29.4)	0	(0.0)	1	(5.9)	2	(11.8)	1	(5.9)	0	(0.0)	1	(5.9)	7	(41.2)	0	(0.0)
Louisiana				27	5	(18.5)	3	(11.1)	7	(25.9)	3	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	9	(33.3)	0	(0.0)
Maine				9	0	(0.0)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(88.9)	0	(0.0)
Maryland				169	14	(8.3)	14	(8.3)	8	(4.7)	13	(7.7)	3	(1.8)	3	(1.8)	7	(4.1)	107	(63.3)	0	(0.0)
Massachusetts				198	2	(1.0)	5	(2.5)	19	(9.6)	16	(8.1)	18	(9.1)	13	(6.6)	3	(1.5)	122	(61.6)	0	(0.0)
Michigan				92	7	(7.6)	5	(5.4)	9	(9.8)	18	(19.6)	3	(3.3)	0	(0.0)	3	(3.3)	47	(51.1)	0	(0.0)
Minnesota				173	14	(8.1)	1	(0.6)	14	(8.1)	6	(3.5)	3	(1.7)	0	(0.0)	1	(0.6)	134	(77.5)	0	(0.0)
Mississippi				17	10	(58.8)	0	(0.0)	0	(0.0)	3	(17.6)	1	(5.9)	0	(0.0)	0	(0.0)	3	(17.6)	0	(0.0)
Missouri				50	9	(18.0)	6	(12.0)	4	(8.0)	3	(6.0)	1	(2.0)	0	(0.0)	0	(0.0)	27	(54.0)	0	(0.0)
Montana				6	0	(0.0)	1	(16.7)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)	4	(66.7)	0	(0.0)
Nebraska				20	8	(40.0)	2	(10.0)	2	(10.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	8	(40.0)	0	(0.0)
Nevada				70	26	(37.1)	20	(28.6)	0	(0.0)	1	(1.4)	4	(5.7)	0	(0.0)	0	(0.0)	19	(27.1)	0	(0.0)
New Hampshire				12	0	(0.0)	0	(0.0)	1	(8.3)	1	(8.3)	1	(8.3)	0	(0.0)	0	(0.0)	9	(75.0)	0	(0.0)

**Table 24. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Country of Origin: States, 2006**

States	Total Cases	Country of Origin															Unknown or Missing		
		Mexico		Philippines		Viet Nam		India		China		Haiti		Rep. Korea		All Others <sup>2</sup>			
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.		(%)	No.
New Jersey	376	31	(8.2)	36	(9.6)	11	(2.9)	68	(18.1)	9	(2.4)	17	(4.5)	17	(4.5)	187	(49.7)	0	(0.0)
New Mexico	23	20	(87.0)	0	(0.0)	2	(8.7)	0	(0.0)	1	(4.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
New York	892	59	(6.6)	46	(5.2)	16	(1.8)	50	(5.6)	115	(12.9)	47	(5.3)	36	(4.0)	523	(58.6)	0	(0.0)
North Carolina	135	44	(32.6)	3	(2.2)	16	(11.9)	14	(10.4)	3	(2.2)	0	(0.0)	0	(0.0)	55	(40.7)	0	(0.0)
North Dakota	4	0	(0.0)	2	(50.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)
Ohio	104	9	(8.7)	5	(4.8)	2	(1.9)	7	(6.7)	1	(1.0)	0	(0.0)	2	(1.9)	78	(75.0)	0	(0.0)
Oklahoma	37	8	(21.6)	2	(5.4)	10	(27.0)	2	(5.4)	1	(2.7)	0	(0.0)	2	(5.4)	12	(32.4)	0	(0.0)
Oregon	48	10	(20.8)	4	(8.3)	6	(12.5)	2	(4.2)	1	(2.1)	1	(2.1)	1	(2.1)	23	(47.9)	0	(0.0)
Pennsylvania	168	9	(5.4)	10	(6.0)	17	(10.1)	23	(13.7)	10	(6.0)	5	(3.0)	8	(4.8)	85	(50.6)	1	(0.6)
Rhode Island	22	0	(0.0)	1	(4.5)	0	(0.0)	0	(0.0)	1	(4.5)	0	(0.0)	0	(0.0)	20	(90.9)	0	(0.0)
South Carolina	40	19	(47.5)	3	(7.5)	3	(7.5)	4	(10.0)	0	(0.0)	0	(0.0)	1	(2.5)	10	(25.0)	0	(0.0)
South Dakota	7	0	(0.0)	1	(14.3)	0	(0.0)	1	(14.3)	1	(14.3)	0	(0.0)	0	(0.0)	4	(57.1)	0	(0.0)
Tennessee	69	19	(27.5)	1	(1.4)	3	(4.3)	9	(13.0)	2	(2.9)	0	(0.0)	2	(2.9)	33	(47.8)	0	(0.0)
Texas	759	390	(51.4)	30	(4.0)	71	(9.4)	31	(4.1)	15	(2.0)	0	(0.0)	2	(0.3)	220	(29.0)	0	(0.0)
Utah	22	7	(31.8)	1	(4.5)	1	(4.5)	3	(13.6)	0	(0.0)	0	(0.0)	0	(0.0)	10	(45.5)	0	(0.0)
Vermont	4	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(75.0)	0	(0.0)
Virginia	230	21	(9.1)	18	(7.8)	28	(12.2)	13	(5.7)	4	(1.7)	0	(0.0)	14	(6.1)	132	(57.4)	0	(0.0)
Washington	187	28	(15.0)	36	(19.3)	25	(13.4)	15	(8.0)	9	(4.8)	0	(0.0)	3	(1.6)	71	(38.0)	0	(0.0)
West Virginia	4	1	(25.0)	0	(0.0)	0	(0.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(50.0)	0	(0.0)
Wisconsin	39	15	(38.5)	4	(10.3)	1	(2.6)	4	(10.3)	2	(5.1)	0	(0.0)	1	(2.6)	12	(30.8)	0	(0.0)
Wyoming	2	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	1	(50.0)	0	(0.0)

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor outlying and Pacific islands.

<sup>2</sup>Includes 140 countries.

**Note:** See Surveillance Slide #17.

**Table 25. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Number of Years in the United States: States, 2006**

States	Total Cases	<1 Year		1–4		5–9		10–19		≥20		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>7,799</b>	<b>1,507</b>	<b>(19.3)</b>	<b>1,658</b>	<b>(21.3)</b>	<b>1,169</b>	<b>(15.0)</b>	<b>1,318</b>	<b>(16.9)</b>	<b>1,348</b>	<b>(17.3)</b>	<b>799</b>	<b>(10.2)</b>
Alabama	53	17	(32.1)	23	(43.4)	9	(17.0)	2	(3.8)	2	(3.8)	0	(0.0)
Alaska	11	2	(18.2)	2	(18.2)	2	(18.2)	3	(27.3)	2	(18.2)	0	(0.0)
Arizona	179	39	(21.8)	40	(22.3)	13	(7.3)	19	(10.6)	38	(21.2)	30	(16.8)
Arkansas	26	4	(15.4)	6	(23.1)	3	(11.5)	5	(19.2)	8	(30.8)	0	(0.0)
California	2,128	369	(17.3)	335	(15.7)	228	(10.7)	426	(20.0)	499	(23.4)	271	(12.7)
Colorado	83	23	(27.7)	20	(24.1)	8	(9.6)	7	(8.4)	10	(12.0)	15	(18.1)
Connecticut	53	7	(13.2)	16	(30.2)	11	(20.8)	11	(20.8)	8	(15.1)	0	(0.0)
Delaware	14	3	(21.4)	1	(7.1)	7	(50.0)	2	(14.3)	1	(7.1)	0	(0.0)
District of Columbia	24	4	(16.7)	10	(41.7)	4	(16.7)	1	(4.2)	1	(4.2)	4	(16.7)
Florida	471	77	(16.3)	108	(22.9)	88	(18.7)	86	(18.3)	60	(12.7)	52	(11.0)
Georgia	204	41	(20.1)	64	(31.4)	47	(23.0)	31	(15.2)	15	(7.4)	6	(2.9)
Hawaii	89	34	(38.2)	10	(11.2)	3	(3.4)	21	(23.6)	15	(16.9)	6	(6.7)
Idaho	10	3	(30.0)	4	(40.0)	0	(0.0)	2	(20.0)	0	(0.0)	1	(10.0)
Illinois	293	45	(15.4)	62	(21.2)	47	(16.0)	48	(16.4)	45	(15.4)	46	(15.7)
Indiana	51	12	(23.5)	13	(25.5)	7	(13.7)	2	(3.9)	4	(7.8)	13	(25.5)
Iowa	28	4	(14.3)	10	(35.7)	7	(25.0)	4	(14.3)	3	(10.7)	0	(0.0)
Kansas	50	11	(22.0)	11	(22.0)	8	(16.0)	4	(8.0)	5	(10.0)	11	(22.0)
Kentucky	17	5	(29.4)	4	(23.5)	4	(23.5)	3	(17.6)	1	(5.9)	0	(0.0)
Louisiana	27	9	(33.3)	2	(7.4)	1	(3.7)	7	(25.9)	4	(14.8)	4	(14.8)
Maine	9	2	(22.2)	5	(55.6)	1	(11.1)	1	(11.1)	0	(0.0)	0	(0.0)
Maryland	169	36	(21.3)	53	(31.4)	32	(18.9)	26	(15.4)	21	(12.4)	1	(0.6)
Massachusetts	198	41	(20.7)	48	(24.2)	38	(19.2)	43	(21.7)	21	(10.6)	7	(3.5)
Michigan	92	7	(7.6)	28	(30.4)	19	(20.7)	20	(21.7)	15	(16.3)	3	(3.3)
Minnesota	173	61	(35.3)	33	(19.1)	21	(12.1)	20	(11.6)	7	(4.0)	31	(17.9)
Mississippi	17	9	(52.9)	2	(11.8)	3	(17.6)	1	(5.9)	2	(11.8)	0	(0.0)
Missouri	50	18	(36.0)	12	(24.0)	7	(14.0)	8	(16.0)	4	(8.0)	1	(2.0)
Montana	6	3	(50.0)	1	(16.7)	1	(16.7)	1	(16.7)	0	(0.0)	0	(0.0)
Nebraska	20	4	(20.0)	6	(30.0)	4	(20.0)	2	(10.0)	4	(20.0)	0	(0.0)
Nevada	70	12	(17.1)	16	(22.9)	8	(11.4)	18	(25.7)	16	(22.9)	0	(0.0)
New Hampshire	12	3	(25.0)	0	(0.0)	4	(33.3)	2	(16.7)	0	(0.0)	3	(25.0)
New Jersey	376	57	(15.2)	67	(17.8)	51	(13.6)	37	(9.8)	40	(10.6)	124	(33.0)
New Mexico	23	5	(21.7)	3	(13.0)	1	(4.3)	5	(21.7)	7	(30.4)	2	(8.7)
New York	892	128	(14.3)	217	(24.3)	154	(17.3)	162	(18.2)	156	(17.5)	75	(8.4)
North Carolina	135	31	(23.0)	42	(31.1)	26	(19.3)	22	(16.3)	9	(6.7)	5	(3.7)
North Dakota	4	1	(25.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(25.0)
Ohio	104	27	(26.0)	35	(33.7)	23	(22.1)	4	(3.8)	10	(9.6)	5	(4.8)
Oklahoma	37	7	(18.9)	8	(21.6)	10	(27.0)	4	(10.8)	8	(21.6)	0	(0.0)
Oregon	48	11	(22.9)	7	(14.6)	3	(6.3)	4	(8.3)	4	(8.3)	19	(39.6)
Pennsylvania	168	31	(18.5)	38	(22.6)	47	(28.0)	16	(9.5)	26	(15.5)	10	(6.0)
Rhode Island	22	5	(22.7)	3	(13.6)	1	(4.5)	0	(0.0)	1	(4.5)	12	(54.5)
South Carolina	40	4	(10.0)	17	(42.5)	12	(30.0)	3	(7.5)	3	(7.5)	1	(2.5)
South Dakota	7	2	(28.6)	3	(42.9)	2	(28.6)	0	(0.0)	0	(0.0)	0	(0.0)
Tennessee	69	21	(30.4)	23	(33.3)	11	(15.9)	11	(15.9)	3	(4.3)	0	(0.0)
Texas	759	165	(21.7)	124	(16.3)	119	(15.7)	146	(19.2)	196	(25.8)	9	(1.2)
Utah	22	1	(4.5)	8	(36.4)	8	(36.4)	3	(13.6)	2	(9.1)	0	(0.0)
Vermont	4	2	(50.0)	2	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	230	54	(23.5)	66	(28.7)	35	(15.2)	41	(17.8)	32	(13.9)	2	(0.9)
Washington	187	36	(19.3)	41	(21.9)	24	(12.8)	29	(15.5)	33	(17.6)	24	(12.8)
West Virginia	4	0	(0.0)	1	(25.0)	2	(50.0)	0	(0.0)	0	(0.0)	1	(25.0)
Wisconsin	39	13	(33.3)	6	(15.4)	5	(12.8)	5	(12.8)	6	(15.4)	4	(10.3)
Wyoming	2	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(50.0)	0	(0.0)

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Surveillance Slide #18.

**Table 26. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease: Reporting Areas, 2006**

States	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Pulmonary and Extrapulmonary Cases		
		No.	(%)	No.	(%)	Total <sup>3</sup>		Miliary
						No.	(%)	No.
<b>United States</b>	<b>13,779</b>	<b>9,678</b>	<b>(70.2)</b>	<b>2,889</b>	<b>(21.0)</b>	<b>1,205</b>	<b>(8.7)</b>	<b>251</b>
Alabama	196	151	(77.0)	27	(13.8)	18	(9.2)	3
Alaska	70	63	(90.0)	6	(8.6)	1	(1.4)	0
Arizona	315	254	(80.6)	39	(12.4)	22	(7.0)	7
Arkansas	102	86	(84.3)	11	(10.8)	3	(2.9)	1
California	2,779	1,907	(68.6)	610	(22.0)	262	(9.4)	51
Colorado	124	76	(61.3)	32	(25.8)	16	(12.9)	1
Connecticut	89	60	(67.4)	24	(27.0)	5	(5.6)	1
Delaware	29	17	(58.6)	8	(27.6)	4	(13.8)	2
District of Columbia	72	58	(80.6)	12	(16.7)	2	(2.8)	1
Florida	1,038	844	(81.3)	148	(14.3)	45	(4.3)	5
Georgia	504	360	(71.4)	106	(21.0)	37	(7.3)	8
Hawaii	115	89	(77.4)	15	(13.0)	11	(9.6)	2
Idaho	20	13	(65.0)	6	(30.0)	1	(5.0)	0
Illinois	569	372	(65.4)	156	(27.4)	40	(7.0)	13
Indiana	125	97	(77.6)	23	(18.4)	5	(4.0)	3
Iowa	40	26	(65.0)	14	(35.0)	0	(0.0)	0
Kansas	82	66	(80.5)	10	(12.2)	6	(7.3)	2
Kentucky	84	67	(79.8)	8	(9.5)	9	(10.7)	2
Louisiana	207	160	(77.3)	35	(16.9)	11	(5.3)	3
Maine	16	11	(68.8)	5	(31.3)	0	(0.0)	0
Maryland	253	163	(64.4)	66	(26.1)	24	(9.5)	2
Massachusetts	259	156	(60.2)	59	(22.8)	44	(17.0)	8
Michigan	221	141	(63.8)	65	(29.4)	15	(6.8)	0
Minnesota	217	115	(53.0)	74	(34.1)	28	(12.9)	0
Mississippi	115	101	(87.8)	7	(6.1)	7	(6.1)	2
Missouri	104	76	(73.1)	15	(14.4)	13	(12.5)	2
Montana	13	10	(76.9)	3	(23.1)	0	(0.0)	0
Nebraska	25	12	(48.0)	13	(52.0)	0	(0.0)	0
Nevada	101	75	(74.3)	19	(18.8)	7	(6.9)	1
New Hampshire	17	9	(52.9)	7	(41.2)	1	(5.9)	1
New Jersey	508	333	(65.6)	124	(24.4)	51	(10.0)	6
New Mexico	48	26	(54.2)	13	(27.1)	9	(18.8)	2
New York	1,271	856	(67.3)	279	(22.0)	136	(10.7)	7
North Carolina	374	259	(69.3)	83	(22.2)	32	(8.6)	13
North Dakota	9	6	(66.7)	3	(33.3)	0	(0.0)	0
Ohio	239	170	(71.1)	54	(22.6)	15	(6.3)	2
Oklahoma	144	106	(73.6)	27	(18.8)	11	(7.6)	0
Oregon	81	59	(72.8)	22	(27.2)	0	(0.0)	0
Pennsylvania	341	230	(67.4)	77	(22.6)	33	(9.7)	6
Rhode Island	26	13	(50.0)	12	(46.2)	1	(3.8)	0
South Carolina	222	137	(61.7)	44	(19.8)	41	(18.5)	18
South Dakota	14	6	(42.9)	7	(50.0)	1	(7.1)	0
Tennessee	279	190	(68.1)	57	(20.4)	32	(11.5)	0
Texas	1,585	1,171	(73.9)	279	(17.6)	135	(8.5)	57
Utah	34	18	(52.9)	10	(29.4)	6	(17.6)	1
Vermont	8	2	(25.0)	5	(62.5)	1	(12.5)	0
Virginia	332	237	(71.4)	69	(20.8)	26	(7.8)	7
Washington	262	157	(59.9)	72	(27.5)	33	(12.6)	7
West Virginia	22	16	(72.7)	6	(27.3)	0	(0.0)	0
Wisconsin	75	50	(66.7)	20	(26.7)	5	(6.7)	4
Wyoming	4	1	(25.0)	3	(75.0)	0	(0.0)	0
American Samoa <sup>4</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	71	50	(70.4)	19	(26.8)	2	(2.8)	1
Guam <sup>4</sup>	53	41	(77.4)	9	(17.0)	3	(5.7)	1
Marshall Islands <sup>4</sup>	27	25	(92.6)	2	(7.4)	0	(0.0)	0
N. Mariana Islands <sup>4</sup>	35	30	(85.7)	4	(11.4)	1	(2.9)	0
Puerto Rico <sup>4</sup>	112	103	(92.0)	7	(6.3)	2	(1.8)	0
Republic of Palau <sup>4</sup>	5	3	(60.0)	2	(40.0)	0	(0.0)	0
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Includes cases with pulmonary listed as major site of disease and no additional site of disease.

<sup>2</sup>Includes cases with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as major site of disease.

<sup>3</sup>Includes military cases.

<sup>4</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** 7 cases had missing and/or unknown site of disease.

Ellipses indicate data not available.



Total Extrapulmonary Cases			Site of Disease														
			Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other		
			No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
States	United States		2,889	494	(17.1)	1,242	(43.0)	326	(11.3)	146	(5.1)	170	(5.9)	139	(4.8)	372	(12.9)
Alabama	27	9	(33.3)	9	(33.3)	2	(7.4)	0	(0.0)	3	(11.1)	2	(7.4)	2	(7.4)	2	(7.4)
Alaska	6	2	(33.3)	3	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(16.7)
Arizona	39	8	(20.5)	18	(46.2)	3	(7.7)	3	(7.7)	2	(5.1)	3	(7.7)	0	(0.0)	5	(12.8)
Arkansas	11	4	(36.4)	1	(9.1)	1	(9.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(9.1)	4	(36.4)
California	610	89	(14.6)	252	(41.3)	71	(11.6)	47	(7.7)	35	(5.7)	43	(7.0)	73	(12.0)	73	(12.0)
Colorado	32	8	(25.0)	11	(34.4)	2	(6.3)	0	(0.0)	4	(12.5)	1	(3.1)	6	(18.8)	6	(18.8)
Connecticut	24	5	(20.8)	8	(33.3)	3	(12.5)	3	(12.5)	3	(12.5)	4	(16.7)	1	(4.2)	0	(0.0)
Delaware	8	2	(25.0)	2	(25.0)	1	(12.5)	0	(0.0)	0	(0.0)	2	(25.0)	1	(12.5)	1	(12.5)
District of Columbia	12	3	(25.0)	4	(33.3)	1	(8.3)	1	(8.3)	1	(8.3)	0	(0.0)	0	(0.0)	3	(25.0)
Florida	148	24	(16.2)	56	(37.8)	12	(8.1)	12	(8.1)	6	(4.1)	13	(8.8)	6	(4.1)	31	(20.9)
Georgia	106	23	(21.7)	46	(43.4)	7	(6.6)	7	(6.6)	2	(1.9)	7	(6.6)	1	(0.9)	20	(18.9)
Hawaii	15	0	(0.0)	5	(33.3)	1	(6.7)	0	(0.0)	0	(0.0)	0	(0.0)	4	(26.7)	5	(33.3)
Idaho	6	3	(50.0)	3	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Illinois	156	33	(21.2)	71	(45.5)	10	(6.4)	10	(6.4)	7	(4.5)	6	(3.8)	7	(4.5)	22	(14.1)
Indiana	23	3	(13.0)	8	(34.8)	7	(30.4)	7	(30.4)	0	(0.0)	1	(4.3)	0	(0.0)	4	(17.4)
Iowa	14	2	(14.3)	7	(50.0)	1	(7.1)	1	(7.1)	2	(14.3)	1	(7.1)	0	(0.0)	1	(7.1)
Kansas	10	2	(20.0)	4	(40.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(10.0)	0	(0.0)	3	(30.0)
Kentucky	8	2	(25.0)	3	(37.5)	1	(12.5)	1	(12.5)	0	(0.0)	0	(0.0)	1	(12.5)	1	(12.5)
Louisiana	35	9	(25.7)	12	(34.3)	3	(8.6)	3	(8.6)	1	(2.9)	2	(5.7)	1	(2.9)	7	(20.0)
Maine	5	0	(0.0)	4	(80.0)	0	(0.0)	0	(0.0)	1	(20.0)	0	(0.0)	0	(0.0)	0	(0.0)
Maryland	66	5	(7.6)	27	(40.9)	9	(13.6)	9	(13.6)	2	(3.0)	7	(10.6)	4	(6.1)	12	(18.2)
Massachusetts	59	9	(15.3)	32	(54.2)	8	(13.6)	8	(13.6)	1	(1.7)	1	(1.7)	4	(6.8)	4	(6.8)
Michigan	65	21	(32.3)	29	(44.6)	5	(7.7)	5	(7.7)	5	(7.7)	1	(1.5)	2	(3.1)	2	(3.1)
Minnesota	74	6	(8.1)	47	(63.5)	11	(14.9)	11	(14.9)	2	(2.7)	2	(2.7)	2	(2.7)	4	(5.4)
Mississippi	7	2	(28.6)	2	(28.6)	0	(0.0)	0	(0.0)	1	(14.3)	0	(0.0)	0	(0.0)	2	(28.6)
Missouri	15	3	(20.0)	11	(73.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)
Montana	3	3	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Nebraska	13	2	(15.4)	8	(61.5)	1	(7.7)	1	(7.7)	1	(7.7)	0	(0.0)	0	(0.0)	1	(7.7)
Nevada	19	2	(10.5)	5	(26.3)	3	(15.8)	3	(15.8)	2	(10.5)	2	(10.5)	1	(5.3)	4	(21.1)
New Hampshire	7	1	(14.3)	4	(57.1)	0	(0.0)	0	(0.0)	1	(14.3)	0	(0.0)	0	(0.0)	1	(14.3)
New Jersey	124	19	(15.3)	63	(50.8)	16	(12.9)	16	(12.9)	7	(5.6)	3	(2.4)	4	(3.2)	12	(9.7)
New Mexico	13	0	(0.0)	1	(7.7)	3	(23.1)	3	(23.1)	1	(7.7)	2	(15.4)	2	(15.4)	4	(30.8)

**Table 27. (Cont'd) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2006**

States	Total Extrapulmonary Cases	Site of Disease													
		Pleural		Lymphatic		Bone and/or Joint		Genitourinary		Meningeal		Peritoneal		Other	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
New York	279	34	(12.2)	121	(43.4)	33	(11.8)	19	(6.8)	18	(6.5)	19	(6.8)	35	(12.5)
North Carolina	83	24	(28.9)	30	(36.1)	10	(12.0)	4	(4.8)	4	(4.8)	4	(4.8)	7	(8.4)
North Dakota	3	0	(0.0)	2	(66.7)	1	(33.3)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	54	10	(18.5)	19	(35.2)	8	(14.8)	2	(3.7)	4	(7.4)	2	(3.7)	9	(16.7)
Oklahoma	27	3	(11.1)	17	(63.0)	2	(7.4)	0	(0.0)	1	(3.7)	0	(0.0)	4	(14.8)
Oregon	22	5	(22.7)	12	(54.5)	0	(0.0)	1	(4.5)	0	(0.0)	0	(0.0)	4	(18.2)
Pennsylvania	77	11	(14.3)	34	(44.2)	14	(18.2)	2	(2.6)	4	(5.2)	5	(6.5)	7	(9.1)
Rhode Island	12	0	(0.0)	9	(75.0)	0	(0.0)	0	(0.0)	2	(16.7)	0	(0.0)	1	(8.3)
South Carolina	44	5	(11.4)	18	(40.9)	4	(9.1)	6	(13.6)	2	(4.5)	1	(2.3)	8	(18.2)
South Dakota	7	0	(0.0)	3	(42.9)	0	(0.0)	0	(0.0)	0	(0.0)	2	(28.6)	2	(28.6)
Tennessee	57	13	(22.8)	19	(33.3)	10	(17.5)	2	(3.5)	2	(3.5)	2	(3.5)	9	(15.8)
Texas	279	63	(22.6)	108	(38.7)	41	(14.7)	6	(2.2)	28	(10.0)	9	(3.2)	24	(8.6)
Utah	10	1	(10.0)	3	(30.0)	0	(0.0)	1	(10.0)	0	(0.0)	0	(0.0)	5	(50.0)
Vermont	5	1	(20.0)	4	(80.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Virginia	69	6	(8.7)	38	(55.1)	11	(15.9)	1	(1.4)	5	(7.2)	0	(0.0)	8	(11.6)
Washington	72	11	(15.3)	35	(48.6)	4	(5.6)	5	(6.9)	2	(2.8)	5	(6.9)	10	(13.9)
West Virginia	6	1	(16.7)	2	(33.3)	2	(33.3)	1	(16.7)	0	(0.0)	0	(0.0)	0	(0.0)
Wisconsin	20	2	(10.0)	12	(60.0)	3	(15.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(15.0)
Wyoming	3	0	(0.0)	0	(0.0)	1	(33.3)	1	(33.3)	0	(0.0)	0	(0.0)	1	(33.3)
American Samoa <sup>1</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>1</sup>	19	3	(15.8)	7	(36.8)	4	(21.1)	0	(0.0)	0	(0.0)	3	(15.8)	2	(10.5)
Guam <sup>1</sup>	9	5	(55.6)	2	(22.2)	1	(11.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(11.1)
Marshall Islands <sup>1</sup>	2	2	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
N. Mariana Islands <sup>1</sup>	4	2	(50.0)	1	(25.0)	1	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico <sup>1</sup>	7	3	(42.9)	3	(42.9)	0	(0.0)	0	(0.0)	1	(14.3)	0	(0.0)	0	(0.0)
Republic of Palau <sup>1</sup>	2	1	(50.0)	1	(50.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
U.S. Virgin Islands <sup>1</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 28. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by Number of Cases: States and the District of Columbia, 2005 and 2006**

States	2006		2005		2005–2006 % Change		Overall Rank by 2006 Rate
	No.	Rate	No.	Rate	No.	Rate	
>500 cases in 2006							
California	2779	7.6	2901	8.0	-4.2	-5.0	4
Texas	1585	6.7	1535	6.7	3.3	0.7	5
New York <sup>1</sup>	1271	6.6	1284	6.6	-1.0	-1.0	6
Florida	1038	5.7	1093	6.2	-5.0	-6.7	8
Illinois	569	4.4	590	4.6	-3.6	-4.1	15
New Jersey	508	5.8	482	5.5	5.4	5.1	7
Georgia	504	5.4	505	5.5	-0.2	-2.7	9
100-499 cases in 2006							
North Carolina	374	4.2	329	3.8	13.7	11.3	18
Pennsylvania	341	2.7	326	2.6	4.6	4.3	28
Virginia	332	4.3	355	4.7	-6.5	-7.4	16
Arizona	315	5.1	281	4.7	12.1	8.2	11
Tennessee	279	4.6	299	5.0	-6.7	-8.0	12
Washington	262	4.1	254	4.0	3.1	1.5	20
Massachusetts	259	4.0	265	4.1	-2.3	-2.3	21
Maryland	253	4.5	283	5.1	-10.6	-11.0	14
Ohio	239	2.1	260	2.3	-8.1	-8.1	35
South Carolina	222	5.1	261	6.1	-14.9	-16.4	10
Michigan	221	2.2	246	2.4	-10.2	-10.1	33
Minnesota	217	4.2	199	3.9	9.0	8.2	18
Louisiana	207	4.8	257	5.7	-19.5	-15.3	12
Alabama	196	4.3	216	4.7	-9.3	-10.3	16
Oklahoma	144	4.0	144	4.1	0.0	-1.0	21
Colorado	124	2.6	101	2.2	22.8	20.4	29
Indiana	125	2.0	146	2.3	-14.4	-15.0	36
Mississippi	115	4.0	103	3.5	11.7	11.6	21
Hawaii	115	8.9	112	8.8	2.7	1.7	3
Missouri	104	1.8	108	1.9	-3.7	-4.4	38
Arkansas	102	3.6	115	4.1	-11.3	-12.4	25
Nevada	101	4.0	112	4.6	-9.8	-12.8	21
<100 cases in 2006							
Connecticut	89	2.5	95	2.7	-6.3	-6.4	30
Kentucky	84	2.0	124	3.0	-32.3	-32.8	36
Kansas	82	3.0	60	2.2	36.7	35.9	27
Oregon	81	2.2	103	2.8	-21.4	-22.7	33
Wisconsin	75	1.3	78	1.4	-3.8	-4.3	45
District of Columbia	72	12.4	55	9.4	30.9	31.0	1
Alaska	70	10.4	59	8.9	18.6	17.4	2
New Mexico	48	2.5	39	2.0	23.1	21.3	30
Iowa	40	1.3	55	1.9	-27.3	-27.7	45
Utah	34	1.3	29	1.2	17.2	14.5	45
Delaware	29	3.4	27	3.2	7.4	5.9	26
Rhode Island	26	2.4	47	4.4	-44.7	-44.4	32
Nebraska	25	1.4	35	2.0	-28.6	-29.0	40
West Virginia	22	1.2	28	1.5	-21.4	-21.6	49
Idaho	20	1.4	23	1.6	-13.0	-15.2	40
New Hampshire	17	1.3	4	0.3	325.0	322.4	45
Maine	16	1.2	17	1.3	-5.9	-6.1	49
South Dakota	14	1.8	16	2.1	-12.5	-13.3	38
Montana	13	1.4	10	1.1	30.0	28.6	40
North Dakota	9	1.4	6	0.9	50.0	49.7	40
Vermont	8	1.3	8	1.3	0.0	-0.2	40
Wyoming	4	0.8	0	0.0	...	...	51
Total	13779	4.6	14080	4.7	-2.1	-3.1	

<sup>1</sup>Includes New York City.

**Note:** Denominators for computing 2005 and 2006 rates for states and the District of Columbia were obtained from Annual Estimates of the Population for the United States and States, and for Puerto Rico: April 1, 2000–July 1, 2006 (NST-EST2006-01) (<http://www.census.gov/popest/states/tables/NST-EST2006-01.xls>) (accessed May 17, 2007).

See Table 20, page 37, for ranking of states without the District of Columbia.

# **Morbidity Tables**

## **Reporting Areas, 2006 and 2004**



**Table 29. Tuberculosis Cases and Percentages by Residence in Correctional Facilities, Age ≥ 15: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Residence in Correctional Facilities		Cases Reported As Residents of Correctional Facilities <sup>1</sup>	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,956</b>	<b>(99.9)</b>	<b>505</b>	<b>(3.9)</b>
Alabama	191	191	(100.0)	3	(1.6)
Alaska	63	63	(100.0)	2	(3.2)
Arizona	274	273	(99.6)	38	(13.9)
Arkansas	95	94	(98.9)	2	(2.1)
California	2,646	2,640	(99.8)	59	(2.2)
Colorado	117	117	(100.0)	1	(0.9)
Connecticut	85	85	(100.0)	0	(0.0)
Delaware	27	27	(100.0)	1	(3.7)
District of Columbia	67	67	(100.0)	1	(1.5)
Florida	981	978	(99.7)	53	(5.4)
Georgia	465	465	(100.0)	35	(7.5)
Hawaii	113	113	(100.0)	0	(0.0)
Idaho	19	19	(100.0)	1	(5.3)
Illinois	525	525	(100.0)	20	(3.8)
Indiana	109	109	(100.0)	3	(2.8)
Iowa	40	40	(100.0)	0	(0.0)
Kansas	81	81	(100.0)	4	(4.9)
Kentucky	84	84	(100.0)	2	(2.4)
Louisiana	194	194	(100.0)	12	(6.2)
Maine	15	15	(100.0)	1	(6.7)
Maryland	245	245	(100.0)	1	(0.4)
Massachusetts	251	251	(100.0)	8	(3.2)
Michigan	211	211	(100.0)	4	(1.9)
Minnesota	193	193	(100.0)	3	(1.6)
Mississippi	107	107	(100.0)	2	(1.9)
Missouri	92	92	(100.0)	2	(2.2)
Montana	13	13	(100.0)	0	(0.0)
Nebraska	22	22	(100.0)	0	(0.0)
Nevada	97	96	(99.0)	3	(3.1)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	492	492	(100.0)	4	(0.8)
New Mexico	46	46	(100.0)	1	(2.2)
New York State <sup>2</sup>	301	300	(99.7)	3	(1.0)
New York City	916	916	(100.0)	18	(2.0)
North Carolina	357	357	(100.0)	14	(3.9)
North Dakota	9	9	(100.0)	1	(11.1)
Ohio	223	223	(100.0)	5	(2.2)
Oklahoma	133	133	(100.0)	8	(6.0)
Oregon	77	77	(100.0)	1	(1.3)
Pennsylvania	307	306	(99.7)	4	(1.3)
Rhode Island	23	23	(100.0)	1	(4.3)
South Carolina	215	215	(100.0)	6	(2.8)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	261	261	(100.0)	10	(3.8)
Texas	1,479	1,479	(100.0)	155	(10.5)
Utah	28	28	(100.0)	1	(3.6)
Vermont	8	8	(100.0)	0	(0.0)
Virginia	306	306	(100.0)	4	(1.3)
Washington	250	249	(99.6)	6	(2.4)
West Virginia	22	22	(100.0)	0	(0.0)
Wisconsin	64	64	(100.0)	1	(1.6)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	53	(98.1)	0	(0.0)
Guam <sup>3</sup>	44	44	(100.0)	1	(2.3)
Marshall Islands <sup>3</sup>	24	24	(100.0)	0	(0.0)
N. Mariana Islands <sup>3</sup>	34	34	(100.0)	1	(2.9)
Puerto Rico <sup>3</sup>	104	104	(100.0)	3	(2.9)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Resident of correctional facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 30. Tuberculosis Cases and Percentages by Homeless Status,<sup>1</sup> Age ≥15: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Homeless Status		Cases Reported As Being Homeless	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,842</b>	<b>(99.0)</b>	<b>796</b>	<b>(6.2)</b>
Alabama	191	191	(100.0)	10	(5.2)
Alaska	63	63	(100.0)	28	(44.4)
Arizona	274	242	(88.3)	29	(12.0)
Arkansas	95	94	(98.9)	2	(2.1)
California	2,646	2,617	(98.9)	163	(6.2)
Colorado	117	117	(100.0)	7	(6.0)
Connecticut	85	85	(100.0)	4	(4.7)
Delaware	27	27	(100.0)	1	(3.7)
District of Columbia	67	67	(100.0)	7	(10.4)
Florida	981	969	(98.8)	80	(8.3)
Georgia	465	463	(99.6)	29	(6.3)
Hawaii	113	113	(100.0)	1	(0.9)
Idaho	19	19	(100.0)	1	(5.3)
Illinois	525	522	(99.4)	27	(5.2)
Indiana	109	109	(100.0)	7	(6.4)
Iowa	40	40	(100.0)	2	(5.0)
Kansas	81	81	(100.0)	4	(4.9)
Kentucky	84	84	(100.0)	6	(7.1)
Louisiana	194	188	(96.9)	17	(9.0)
Maine	15	15	(100.0)	1	(6.7)
Maryland	245	245	(100.0)	6	(2.4)
Massachusetts	251	249	(99.2)	11	(4.4)
Michigan	211	211	(100.0)	9	(4.3)
Minnesota	193	193	(100.0)	3	(1.6)
Mississippi	107	107	(100.0)	6	(5.6)
Missouri	92	91	(98.9)	11	(12.1)
Montana	13	13	(100.0)	2	(15.4)
Nebraska	22	22	(100.0)	1	(4.5)
Nevada	97	95	(97.9)	9	(9.5)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	492	492	(100.0)	24	(4.9)
New Mexico	46	44	(95.7)	3	(6.8)
New York State <sup>2</sup>	301	287	(95.3)	5	(1.7)
New York City	916	904	(98.7)	52	(5.8)
North Carolina	357	356	(99.7)	20	(5.6)
North Dakota	9	9	(100.0)	0	(0.0)
Ohio	223	220	(98.7)	10	(4.5)
Oklahoma	133	133	(100.0)	9	(6.8)
Oregon	77	77	(100.0)	11	(14.3)
Pennsylvania	307	305	(99.3)	8	(2.6)
Rhode Island	23	23	(100.0)	0	(0.0)
South Carolina	215	215	(100.0)	11	(5.1)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	261	261	(100.0)	15	(5.7)
Texas	1,479	1,479	(100.0)	98	(6.6)
Utah	28	28	(100.0)	3	(10.7)
Vermont	8	8	(100.0)	1	(12.5)
Virginia	306	306	(100.0)	1	(0.3)
Washington	250	249	(99.6)	33	(13.3)
West Virginia	22	19	(86.4)	1	(5.3)
Wisconsin	64	63	(98.4)	6	(9.5)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	49	(90.7)	0	(0.0)
Guam <sup>3</sup>	44	43	(97.7)	1	(2.3)
Marshall Islands <sup>3</sup>	24	24	(100.0)	0	(0.0)
N. Mariana Islands <sup>3</sup>	34	33	(97.1)	0	(0.0)
Puerto Rico <sup>3</sup>	104	104	(100.0)	3	(2.9)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Homeless within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 31. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,<sup>1</sup>  
Age ≥15: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Residence in Long-term Care Facilities		Cases Reported As Residents of Long-term Care Facilities	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,953</b>	<b>(99.9)</b>	<b>312</b>	<b>(2.4)</b>
Alabama	191	191	(100.0)	9	(4.7)
Alaska	63	63	(100.0)	0	(0.0)
Arizona	274	273	(99.6)	10	(3.7)
Arkansas	95	95	(100.0)	3	(3.2)
California	2,646	2,640	(99.8)	62	(2.3)
Colorado	117	117	(100.0)	7	(6.0)
Connecticut	85	85	(100.0)	2	(2.4)
Delaware	27	27	(100.0)	1	(3.7)
District of Columbia	67	67	(100.0)	0	(0.0)
Florida	981	978	(99.7)	15	(1.5)
Georgia	465	465	(100.0)	6	(1.3)
Hawaii	113	113	(100.0)	1	(0.9)
Idaho	19	19	(100.0)	3	(15.8)
Illinois	525	525	(100.0)	11	(2.1)
Indiana	109	109	(100.0)	4	(3.7)
Iowa	40	40	(100.0)	2	(5.0)
Kansas	81	81	(100.0)	4	(4.9)
Kentucky	84	84	(100.0)	6	(7.1)
Louisiana	194	194	(100.0)	4	(2.1)
Maine	15	15	(100.0)	0	(0.0)
Maryland	245	245	(100.0)	12	(4.9)
Massachusetts	251	251	(100.0)	3	(1.2)
Michigan	211	211	(100.0)	6	(2.8)
Minnesota	193	193	(100.0)	1	(0.5)
Mississippi	107	107	(100.0)	7	(6.5)
Missouri	92	92	(100.0)	5	(5.4)
Montana	13	13	(100.0)	0	(0.0)
Nebraska	22	22	(100.0)	0	(0.0)
Nevada	97	96	(99.0)	0	(0.0)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	492	492	(100.0)	7	(1.4)
New Mexico	46	46	(100.0)	1	(2.2)
New York State <sup>2</sup>	301	297	(98.7)	14	(4.7)
New York City	916	916	(100.0)	7	(0.8)
North Carolina	357	357	(100.0)	7	(2.0)
North Dakota	9	9	(100.0)	0	(0.0)
Ohio	223	223	(100.0)	11	(4.9)
Oklahoma	133	133	(100.0)	8	(6.0)
Oregon	77	77	(100.0)	5	(6.5)
Pennsylvania	307	305	(99.3)	11	(3.6)
Rhode Island	23	23	(100.0)	0	(0.0)
South Carolina	215	215	(100.0)	9	(4.2)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	261	261	(100.0)	4	(1.5)
Texas	1,479	1,479	(100.0)	24	(1.6)
Utah	28	28	(100.0)	1	(3.6)
Vermont	8	8	(100.0)	0	(0.0)
Virginia	306	306	(100.0)	11	(3.6)
Washington	250	249	(99.6)	5	(2.0)
West Virginia	22	22	(100.0)	0	(0.0)
Wisconsin	64	64	(100.0)	1	(1.6)
Wyoming	4	4	(100.0)	1	(25.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	53	(98.1)	3	(5.7)
Guam <sup>3</sup>	44	44	(100.0)	0	(0.0)
Marshall Islands <sup>3</sup>	24	24	(100.0)	0	(0.0)
N. Mariana Islands <sup>3</sup>	34	34	(100.0)	0	(0.0)
Puerto Rico <sup>3</sup>	104	104	(100.0)	3	(2.9)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Resident of long-term care facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.



**Table 32. Tuberculosis Cases and Percentages by Injecting Drug Use,<sup>1</sup> Age ≥15:  
Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Injecting Drug Use		Cases Reporting Injecting Drug Use	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,655</b>	<b>(97.6)</b>	<b>247</b>	<b>(2.0)</b>
Alabama	191	191	(100.0)	2	(1.0)
Alaska	63	62	(98.4)	0	(0.0)
Arizona	274	230	(83.9)	6	(2.6)
Arkansas	95	95	(100.0)	1	(1.1)
California	2,646	2,577	(97.4)	41	(1.6)
Colorado	117	117	(100.0)	0	(0.0)
Connecticut	85	85	(100.0)	2	(2.4)
Delaware	27	27	(100.0)	1	(3.7)
District of Columbia	67	67	(100.0)	1	(1.5)
Florida	981	972	(99.1)	28	(2.9)
Georgia	465	456	(98.1)	7	(1.5)
Hawaii	113	55	(48.7)	--	--
Idaho	19	15	(78.9)	0	(0.0)
Illinois	525	494	(94.1)	8	(1.6)
Indiana	109	109	(100.0)	2	(1.8)
Iowa	40	40	(100.0)	1	(2.5)
Kansas	81	81	(100.0)	5	(6.2)
Kentucky	84	84	(100.0)	2	(2.4)
Louisiana	194	180	(92.8)	4	(2.2)
Maine	15	15	(100.0)	1	(6.7)
Maryland	245	242	(98.8)	6	(2.5)
Massachusetts	251	245	(97.6)	5	(2.0)
Michigan	211	210	(99.5)	3	(1.4)
Minnesota	193	192	(99.5)	1	(0.5)
Mississippi	107	107	(100.0)	1	(0.9)
Missouri	92	91	(98.9)	1	(1.1)
Montana	13	13	(100.0)	0	(0.0)
Nebraska	22	22	(100.0)	0	(0.0)
Nevada	97	96	(99.0)	3	(3.1)
New Hampshire	15	15	(100.0)	0	(0.0)
New Jersey	492	491	(99.8)	8	(1.6)
New Mexico	46	42	(91.3)	0	(0.0)
New York State <sup>2</sup>	301	285	(94.7)	2	(0.7)
New York City	916	900	(98.3)	27	(3.0)
North Carolina	357	354	(99.2)	7	(2.0)
North Dakota	9	8	(88.9)	1	(12.5)
Ohio	223	222	(99.6)	1	(0.5)
Oklahoma	133	133	(100.0)	8	(6.0)
Oregon	77	76	(98.7)	5	(6.6)
Pennsylvania	307	302	(98.4)	3	(1.0)
Rhode Island	23	23	(100.0)	0	(0.0)
South Carolina	215	214	(99.5)	3	(1.4)
South Dakota	13	13	(100.0)	0	(0.0)
Tennessee	261	260	(99.6)	6	(2.3)
Texas	1,479	1,479	(100.0)	32	(2.2)
Utah	28	28	(100.0)	0	(0.0)
Vermont	8	8	(100.0)	0	(0.0)
Virginia	306	306	(100.0)	6	(2.0)
Washington	250	242	(96.8)	6	(2.5)
West Virginia	22	19	(86.4)	0	(0.0)
Wisconsin	64	61	(95.3)	0	(0.0)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	48	(88.9)	0	(0.0)
Guam <sup>3</sup>	44	44	(100.0)	0	(0.0)
Marshall Islands <sup>3</sup>	24	24	(100.0)	0	(0.0)
N. Mariana Islands <sup>3</sup>	34	33	(97.1)	0	(0.0)
Puerto Rico <sup>3</sup>	104	104	(100.0)	18	(17.3)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Injecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 33. Tuberculosis Cases and Percentages by Noninjecting Drug Use,<sup>1</sup> Age ≥15: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Noninjecting Drug Use		Cases Reporting Noninjecting Drug Use	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,611</b>	<b>(97.2)</b>	<b>990</b>	<b>(7.9)</b>
Alabama	191	191	(100.0)	9	(4.7)
Alaska	63	61	(96.8)	2	(3.3)
Arizona	274	230	(83.9)	16	(7.0)
Arkansas	95	95	(100.0)	2	(2.1)
California	2,646	2,567	(97.0)	160	(6.2)
Colorado	117	117	(100.0)	4	(3.4)
Connecticut	85	85	(100.0)	5	(5.9)
Delaware	27	27	(100.0)	2	(7.4)
District of Columbia	67	65	(97.0)	3	(4.6)
Florida	981	973	(99.2)	145	(14.9)
Georgia	465	456	(98.1)	58	(12.7)
Hawaii	113	56	(49.6)	--	--
Idaho	19	14	(73.7)	--	--
Illinois	525	490	(93.3)	46	(9.4)
Indiana	109	109	(100.0)	5	(4.6)
Iowa	40	40	(100.0)	0	(0.0)
Kansas	81	81	(100.0)	9	(11.1)
Kentucky	84	84	(100.0)	8	(9.5)
Louisiana	194	173	(89.2)	27	(15.6)
Maine	15	15	(100.0)	1	(6.7)
Maryland	245	242	(98.8)	10	(4.1)
Massachusetts	251	236	(94.0)	10	(4.2)
Michigan	211	210	(99.5)	12	(5.7)
Minnesota	193	192	(99.5)	4	(2.1)
Mississippi	107	107	(100.0)	9	(8.4)
Missouri	92	91	(98.9)	6	(6.6)
Montana	13	13	(100.0)	0	(0.0)
Nebraska	22	22	(100.0)	0	(0.0)
Nevada	97	93	(95.9)	7	(7.5)
New Hampshire	15	15	(100.0)	1	(6.7)
New Jersey	492	491	(99.8)	25	(5.1)
New Mexico	46	42	(91.3)	3	(7.1)
New York State <sup>2</sup>	301	275	(91.4)	6	(2.2)
New York City	916	901	(98.4)	70	(7.8)
North Carolina	357	355	(99.4)	44	(12.4)
North Dakota	9	7	(77.8)	1	(14.3)
Ohio	223	222	(99.6)	18	(8.1)
Oklahoma	133	133	(100.0)	20	(15.0)
Oregon	77	74	(96.1)	8	(10.8)
Pennsylvania	307	302	(98.4)	10	(3.3)
Rhode Island	23	23	(100.0)	0	(0.0)
South Carolina	215	214	(99.5)	33	(15.4)
South Dakota	13	13	(100.0)	1	(7.7)
Tennessee	261	261	(100.0)	26	(10.0)
Texas	1,479	1,479	(100.0)	122	(8.2)
Utah	28	28	(100.0)	1	(3.6)
Vermont	8	8	(100.0)	0	(0.0)
Virginia	306	306	(100.0)	8	(2.6)
Washington	250	242	(96.8)	23	(9.5)
West Virginia	22	19	(86.4)	2	(10.5)
Wisconsin	64	62	(96.9)	6	(9.7)
Wyoming	4	4	(100.0)	0	(0.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	41	(75.9)	0	(0.0)
Guam <sup>3</sup>	44	41	(93.2)	0	(0.0)
Marshall Islands <sup>3</sup>	24	18	(75.0)	0	(0.0)
N. Mariana Islands <sup>3</sup>	34	31	(91.2)	0	(0.0)
Puerto Rico <sup>3</sup>	104	104	(100.0)	22	(21.2)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Noninjecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 34. Tuberculosis Cases and Percentages by Excess Alcohol Use,<sup>1</sup> Age ≥15:  
Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Excess Alcohol Use		Cases Reporting Excess Alcohol Use	
		No.	(%)	No.	(%)
<b>United States</b>	<b>12,971</b>	<b>12,674</b>	<b>(97.7)</b>	<b>1,795</b>	<b>(14.2)</b>
Alabama	191	191	(100.0)	21	(11.0)
Alaska	63	63	(100.0)	30	(47.6)
Arizona	274	232	(84.7)	38	(16.4)
Arkansas	95	95	(100.0)	6	(6.3)
California	2,646	2,576	(97.4)	222	(8.6)
Colorado	117	117	(100.0)	11	(9.4)
Connecticut	85	85	(100.0)	11	(12.9)
Delaware	27	27	(100.0)	3	(11.1)
District of Columbia	67	67	(100.0)	4	(6.0)
Florida	981	974	(99.3)	199	(20.4)
Georgia	465	452	(97.2)	83	(18.4)
Hawaii	113	74	(65.5)	--	--
Idaho	19	16	(84.2)	3	(18.8)
Illinois	525	492	(93.7)	74	(15.0)
Indiana	109	109	(100.0)	22	(20.2)
Iowa	40	40	(100.0)	3	(7.5)
Kansas	81	81	(100.0)	17	(21.0)
Kentucky	84	84	(100.0)	11	(13.1)
Louisiana	194	179	(92.3)	36	(20.1)
Maine	15	15	(100.0)	3	(20.0)
Maryland	245	242	(98.8)	20	(8.3)
Massachusetts	251	245	(97.6)	20	(8.2)
Michigan	211	210	(99.5)	23	(11.0)
Minnesota	193	192	(99.5)	10	(5.2)
Mississippi	107	107	(100.0)	28	(26.2)
Missouri	92	91	(98.9)	13	(14.3)
Montana	13	13	(100.0)	4	(30.8)
Nebraska	22	22	(100.0)	1	(4.5)
Nevada	97	97	(100.0)	8	(8.2)
New Hampshire	15	15	(100.0)	2	(13.3)
New Jersey	492	491	(99.8)	31	(6.3)
New Mexico	46	44	(95.7)	11	(25.0)
New York State <sup>2</sup>	301	280	(93.0)	21	(7.5)
New York City	916	901	(98.4)	133	(14.8)
North Carolina	357	355	(99.4)	64	(18.0)
North Dakota	9	8	(88.9)	3	(37.5)
Ohio	223	221	(99.1)	27	(12.2)
Oklahoma	133	133	(100.0)	31	(23.3)
Oregon	77	74	(96.1)	6	(8.1)
Pennsylvania	307	302	(98.4)	19	(6.3)
Rhode Island	23	23	(100.0)	0	(0.0)
South Carolina	215	214	(99.5)	65	(30.4)
South Dakota	13	13	(100.0)	2	(15.4)
Tennessee	261	261	(100.0)	37	(14.2)
Texas	1,479	1,479	(100.0)	314	(21.2)
Utah	28	28	(100.0)	2	(7.1)
Vermont	8	8	(100.0)	0	(0.0)
Virginia	306	306	(100.0)	27	(8.8)
Washington	250	244	(97.6)	35	(14.3)
West Virginia	22	19	(86.4)	8	(42.1)
Wisconsin	64	63	(98.4)	10	(15.9)
Wyoming	4	4	(100.0)	1	(25.0)
American Samoa <sup>3</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	48	(88.9)	1	(2.1)
Guam <sup>3</sup>	44	43	(97.7)	0	(0.0)
Marshall Islands <sup>3</sup>	24	23	(95.8)	1	(4.3)
N. Mariana Islands <sup>3</sup>	34	32	(94.1)	0	(0.0)
Puerto Rico <sup>3</sup>	104	104	(100.0)	19	(18.3)
Republic of Palau <sup>3</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...

<sup>1</sup>Excess alcohol use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 35. Tuberculosis Cases and Percentages by Initial Drug Regimen:  
Reporting Areas, 2006**

Reporting Area	Total Cases	Cases in Persons Alive at Diagnosis	Cases with Information on Initial Drug Regimen		Percentage of Cases in Persons with Initial Drug Regimen <sup>1,2</sup>			
			No.	(%)	IR	IRZ	IRZ,E/S	IRZE <sup>3</sup>
<b>United States</b>	<b>13,779</b>	<b>13,458</b>	<b>13,402</b>	<b>(99.6)</b>	<b>(1.2)</b>	<b>(4.8)</b>	<b>(83.0)</b>	<b>(82.9)</b>
Alabama	196	192	192	(100.0)	(0.5)	(2.1)	(89.6)	(89.6)
Alaska	70	68	68	(100.0)	(1.5)	(10.3)	(80.9)	(80.9)
Arizona	315	308	306	(99.4)	(0.7)	(3.9)	(86.3)	(84.6)
Arkansas	102	99	99	(100.0)	(18.2)	(27.3)	(37.4)	(37.4)
California	2,779	2,714	2,712	(99.9)	(0.8)	(2.9)	(86.9)	(86.8)
Colorado	124	121	121	(100.0)	(0.8)	(3.3)	(79.3)	(79.3)
Connecticut	89	85	85	(100.0)	(1.2)	(7.1)	(82.4)	(82.4)
Delaware	29	28	28	(100.0)	(0.0)	(3.6)	(92.9)	(92.9)
District of Columbia	72	72	64	(88.9)	(1.6)	(3.1)	(93.8)	(93.8)
Florida	1,038	1,013	1,012	(99.9)	(0.2)	(5.5)	(85.1)	(85.1)
Georgia	504	489	488	(99.8)	(0.4)	(5.9)	(75.0)	(75.0)
Hawaii	115	115	115	(100.0)	(1.7)	(5.2)	(81.7)	(80.9)
Idaho	20	20	19	(95.0)	(5.3)	(10.5)	(78.9)	(78.9)
Illinois	569	562	552	(98.2)	(1.1)	(5.8)	(84.8)	(84.8)
Indiana	125	123	122	(99.2)	(0.0)	(9.0)	(84.4)	(84.4)
Iowa	40	39	39	(100.0)	(0.0)	(10.3)	(82.1)	(82.1)
Kansas	82	78	78	(100.0)	(0.0)	(3.8)	(84.6)	(84.6)
Kentucky	84	83	83	(100.0)	(0.0)	(2.4)	(88.0)	(88.0)
Louisiana	207	196	195	(99.5)	(3.1)	(7.7)	(87.2)	(87.2)
Maine	16	16	16	(100.0)	(0.0)	(18.8)	(81.3)	(81.3)
Maryland	253	244	244	(100.0)	(0.0)	(4.5)	(93.4)	(93.4)
Massachusetts	259	257	255	(99.2)	(0.4)	(0.8)	(85.1)	(85.1)
Michigan	221	218	218	(100.0)	(5.0)	(19.7)	(69.7)	(69.7)
Minnesota	217	213	213	(100.0)	(0.5)	(4.2)	(87.3)	(87.3)
Mississippi	115	112	112	(100.0)	(1.8)	(13.4)	(80.4)	(80.4)
Missouri	104	102	102	(100.0)	(2.0)	(15.7)	(78.4)	(78.4)
Montana	13	12	12	(100.0)	(0.0)	(0.0)	(100.0)	(100.0)
Nebraska	25	24	24	(100.0)	(0.0)	(20.8)	(79.2)	(79.2)
Nevada	101	100	100	(100.0)	(0.0)	(0.0)	(94.0)	(94.0)
New Hampshire	17	17	17	(100.0)	(0.0)	(5.9)	(88.2)	(88.2)
New Jersey	508	497	497	(100.0)	(1.0)	(4.4)	(82.7)	(82.7)
New Mexico	48	46	46	(100.0)	(0.0)	(10.9)	(82.6)	(82.6)
New York State <sup>4</sup>	317	310	309	(99.7)	(1.0)	(5.5)	(84.8)	(84.8)
New York City	954	939	939	(100.0)	(1.6)	(1.8)	(86.5)	(86.5)
North Carolina	374	367	367	(100.0)	(0.5)	(1.9)	(90.7)	(90.2)
North Dakota	9	9	9	(100.0)	(0.0)	(0.0)	(100.0)	(100.0)
Ohio	239	234	234	(100.0)	(1.3)	(3.4)	(88.0)	(87.6)
Oklahoma	144	141	141	(100.0)	(12.8)	(12.8)	(63.1)	(63.1)
Oregon	81	78	78	(100.0)	(0.0)	(2.6)	(89.7)	(89.7)
Pennsylvania	341	331	331	(100.0)	(0.6)	(3.6)	(42.6)	(42.6)
Rhode Island	26	26	26	(100.0)	(7.7)	(3.8)	(76.9)	(76.9)
South Carolina	222	213	213	(100.0)	(0.9)	(3.8)	(81.2)	(81.2)
South Dakota	14	14	14	(100.0)	(0.0)	(14.3)	(71.4)	(71.4)
Tennessee	279	273	273	(100.0)	(1.5)	(5.5)	(61.9)	(61.9)
Texas	1,585	1,541	1,518	(98.5)	(1.1)	(4.2)	(84.4)	(84.4)
Utah	34	34	34	(100.0)	(0.0)	(5.9)	(88.2)	(88.2)
Vermont	8	7	6	(85.7)	(0.0)	(50.0)	(50.0)	(50.0)
Virginia	332	321	321	(100.0)	(0.9)	(5.3)	(83.5)	(83.5)
Washington	262	257	257	(100.0)	(1.2)	(4.7)	(86.8)	(86.8)
West Virginia	22	22	21	(95.5)	(0.0)	(0.0)	(90.5)	(90.5)
Wisconsin	75	74	73	(98.6)	(0.0)	(6.8)	(84.9)	(84.9)
Wyoming	4	4	4	(100.0)	(0.0)	(0.0)	(100.0)	(100.0)
American Samoa <sup>5</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>5</sup>	71	69	68	(98.6)	(0.0)	(13.2)	(80.9)	(76.5)
Guam <sup>5</sup>	53	53	53	(100.0)	(0.0)	(1.9)	(96.2)	(96.2)
Marshall Islands <sup>5</sup>	27	27	27	(100.0)	(0.0)	(11.1)	(81.5)	(81.5)
N. Mariana Islands <sup>5</sup>	35	35	35	(100.0)	(0.0)	(2.9)	(97.1)	(97.1)
Puerto Rico <sup>5</sup>	112	105	105	(100.0)	(2.9)	(1.9)	(92.4)	(92.4)
Republic of Palau <sup>5</sup>	5	5	4	(80.0)	(0.0)	(25.0)	(75.0)	(75.0)
U.S. Virgin Islands <sup>5</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol; S=streptomycin.

<sup>3</sup>Streptomycin is no longer considered a first-line drug. CDC. Treatment of Tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11): 1–77.

<sup>4</sup>Excludes New York City.

<sup>5</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Excluding cases with no information on drug regimen, 421 (3.1%) persons were not started on any drugs, 12 (<0.1%) were started on one drug, and 1,313 (9.6%) had an initial multidrug regimen other than IR, IRZ, or IRZ,E/S.

Ellipses indicate data not available.

**Table 36. Culture-Positive Tuberculosis Cases and Percentages with Drug-Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2006**

Reporting Area	Total Culture Positive Cases	Cases with Initial Drug-Susceptibility Testing Performed <sup>1</sup>		Resistance <sup>2</sup>			
				Isoniazid <sup>1</sup>		Isoniazid and Rifampin <sup>1</sup>	
		No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>10,783</b>	<b>9,946</b>	<b>(92.2)</b>	<b>818</b>	<b>(8.2)</b>	<b>111</b>	<b>(1.1)</b>
Alabama	174	138	(79.3)	3	(2.2)	1	(0.7)
Alaska	61	61	(100.0)	4	(6.6)	2	(3.3)
Arizona	229	201	(87.8)	17	(8.5)	2	(1.0)
Arkansas	72	69	(95.8)	1	(1.4)	0	(0.0)
California	2,241	2,136	(95.3)	209	(9.8)	31	(1.5)
Colorado	86	86	(100.0)	11	(12.8)	1	(1.2)
Connecticut	72	71	(98.6)	3	(4.2)	1	(1.4)
Delaware	23	23	(100.0)	0	(0.0)	0	(0.0)
District of Columbia	65	62	(95.4)	6	(9.7)	2	(3.2)
Florida	845	795	(94.1)	72	(9.1)	5	(0.6)
Georgia	388	368	(94.8)	27	(7.3)	0	(0.0)
Hawaii	83	82	(98.8)	9	(11.0)	0	(0.0)
Idaho	19	16	(84.2)	0	(0.0)	0	(0.0)
Illinois	437	404	(92.4)	26	(6.4)	1	(0.2)
Indiana	98	92	(93.9)	2	(2.2)	0	(0.0)
Iowa	29	29	(100.0)	1	(3.4)	0	(0.0)
Kansas	64	57	(89.1)	4	(7.0)	2	(3.5)
Kentucky	71	66	(93.0)	3	(4.5)	0	(0.0)
Louisiana	168	132	(78.6)	4	(3.0)	1	(0.8)
Maine	13	12	(92.3)	1	(8.3)	0	(0.0)
Maryland	196	195	(99.5)	13	(6.7)	0	(0.0)
Massachusetts	200	197	(98.5)	26	(13.2)	4	(2.0)
Michigan	176	173	(98.3)	10	(5.8)	1	(0.6)
Minnesota	177	175	(98.9)	19	(10.9)	2	(1.1)
Mississippi	88	85	(96.6)	4	(4.7)	0	(0.0)
Missouri	82	81	(98.8)	9	(11.1)	2	(2.5)
Montana	11	10	(90.9)	1	(10.0)	1	(10.0)
Nebraska	19	19	(100.0)	1	(5.3)	0	(0.0)
Nevada	87	86	(98.9)	8	(9.3)	0	(0.0)
New Hampshire	12	12	(100.0)	2	(16.7)	0	(0.0)
New Jersey	386	373	(96.6)	43	(11.5)	5	(1.3)
New Mexico	44	41	(93.2)	2	(4.9)	0	(0.0)
New York State <sup>3</sup>	239	238	(99.6)	34	(14.3)	3	(1.3)
New York City	717	691	(96.4)	70	(10.1)	15	(2.2)
North Carolina	302	290	(96.0)	22	(7.6)	0	(0.0)
North Dakota	7	7	(100.0)	0	(0.0)	0	(0.0)
Ohio	183	175	(95.6)	13	(7.4)	1	(0.6)
Oklahoma	77	71	(92.2)	3	(4.2)	0	(0.0)
Oregon	73	72	(98.6)	3	(4.2)	1	(1.4)
Pennsylvania	245	206	(84.1)	22	(10.7)	6	(2.9)
Rhode Island	13	13	(100.0)	2	(15.4)	0	(0.0)
South Carolina	173	165	(95.4)	7	(4.2)	0	(0.0)
South Dakota	11	11	(100.0)	1	(9.1)	0	(0.0)
Tennessee	207	196	(94.7)	2	(1.0)	0	(0.0)
Texas	1,218	918	(75.4)	43	(4.7)	9	(1.0)
Utah	22	22	(100.0)	3	(13.6)	0	(0.0)
Vermont	8	7	(87.5)	1	(14.3)	1	(14.3)
Virginia	267	228	(85.4)	21	(9.2)	4	(1.8)
Washington	216	210	(97.2)	26	(12.4)	5	(2.4)
West Virginia	22	14	(63.6)	--	--	--	--
Wisconsin	64	62	(96.9)	3	(4.8)	2	(3.2)
Wyoming	3	3	(100.0)	0	(0.0)	0	(0.0)
American Samoa <sup>4</sup>	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	26	21	(80.8)	0	(0.0)	0	(0.0)
Guam <sup>4</sup>	32	29	(90.6)	2	(6.9)	0	(0.0)
Marshall Islands <sup>4</sup>	17	16	(94.1)	1	(6.3)	1	(6.3)
N. Mariana Islands <sup>4</sup>	14	6	(42.9)	--	--	--	--
Puerto Rico <sup>4</sup>	105	99	(94.3)	5	(5.1)	1	(1.0)
Republic of Palau <sup>4</sup>	2	1	(50.0)	--	--	--	--
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...	...

<sup>1</sup>Patients tested to at least isoniazid and rifampin

<sup>2</sup>Isolates may be resistant to other drugs. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>3</sup>Excludes New York City.

<sup>4</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 37. Tuberculosis Cases and Percentages Among Persons Aged 25–44 by HIV Status: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on HIV Status <sup>1</sup>		Cases in Persons with HIV-Positive Results <sup>2</sup>	
		No.	(%)	No.	(%)
<b>United States</b>	<b>4,702</b>	<b>3,157</b>	<b>(67.1)</b>	<b>--</b>	<b>--</b>
Alabama	62	55	(88.7)	6	(10.9)
Alaska	23	20	(87.0)	1	(5.0)
Arizona	106	89	(84.0)	9	(10.1)
Arkansas	25	21	(84.0)	3	(14.3)
California	859	0	(0.0)	--	--
Colorado	36	35	(97.2)	5	(14.3)
Connecticut	37	28	(75.7)	5	(17.9)
Delaware	6	6	(100.0)	2	(33.3)
District of Columbia	30	26	(86.7)	5	(19.2)
Florida	375	348	(92.8)	100	(28.7)
Georgia	194	174	(89.7)	34	(19.5)
Hawaii	33	13	(39.4)	--	--
Idaho	8	1	(12.5)	--	--
Illinois	175	149	(85.1)	18	(12.1)
Indiana	41	26	(63.4)	--	--
Iowa	15	12	(80.0)	3	(25.0)
Kansas	30	30	(100.0)	1	(3.3)
Kentucky	23	22	(95.7)	3	(13.6)
Louisiana	74	58	(78.4)	11	(19.0)
Maine	6	5	(83.3)	0	(0.0)
Maryland	99	85	(85.9)	16	(18.8)
Massachusetts	117	84	(71.8)	--	--
Michigan	59	44	(74.6)	--	--
Minnesota	75	68	(90.7)	6	(8.8)
Mississippi	30	29	(96.7)	7	(24.1)
Missouri	37	29	(78.4)	4	(13.8)
Montana	6	6	(100.0)	0	(0.0)
Nebraska	9	9	(100.0)	0	(0.0)
Nevada	32	31	(96.9)	4	(12.9)
New Hampshire	6	6	(100.0)	0	(0.0)
New Jersey	223	158	(70.9)	--	--
New Mexico	11	10	(90.9)	0	(0.0)
New York State <sup>3</sup>	111	86	(77.5)	16	(18.6)
New York City	381	320	(84.0)	64	(20.0)
North Carolina	132	126	(95.5)	14	(11.1)
North Dakota	4	4	(100.0)	0	(0.0)
Ohio	81	73	(90.1)	6	(8.2)
Oklahoma	35	34	(97.1)	3	(8.8)
Oregon	26	24	(92.3)	2	(8.3)
Pennsylvania	99	67	(67.7)	--	--
Rhode Island	11	8	(72.7)	--	--
South Carolina	64	62	(96.9)	12	(19.4)
South Dakota	5	5	(100.0)	2	(40.0)
Tennessee	83	71	(85.5)	10	(14.1)
Texas	555	390	(70.3)	--	--
Utah	12	12	(100.0)	1	(8.3)
Vermont	--	--	--	--	--
Virginia	119	95	(79.8)	13	(13.7)
Washington	94	82	(87.2)	5	(6.1)
West Virginia	5	1	(20.0)	--	--
Wisconsin	21	18	(85.7)	0	(0.0)
Wyoming	1	1	(100.0)	0	(0.0)
American Samoa <sup>4</sup>	...	...	...	...	...
Fed. States of Micronesia <sup>4</sup>	14	8	(57.1)	--	--
Guam <sup>4</sup>	13	10	(76.9)	0	(0.0)
Marshall Islands <sup>4</sup>	4	4	(100.0)	0	(0.0)
N. Mariana Islands <sup>4</sup>	18	18	(100.0)	0	(0.0)
Puerto Rico <sup>4</sup>	31	30	(96.8)	11	(36.7)
Republic of Palau <sup>4</sup>	3	3	(100.0)	0	(0.0)
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...

<sup>1</sup>Includes only those cases in persons with negative, positive, or indeterminate HIV test results.

<sup>2</sup>Counts and percentages shown only for reporting areas with information reported for ≥75% of cases. All 2006 California cases had an unknown HIV status because CA HIV data for 2006 were not available at time of publication.

<sup>3</sup>Excludes New York City.

<sup>4</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.



**Table 38. Tuberculosis Cases and Percentages by Occupation, Age ≥15: Reporting Areas, 2006**

Reporting Area	Total Cases	Cases with Information on Occupation		Percentage of Cases by Occupation <sup>1</sup>					
		No.	(%)	Unemployed Past 24 Mos.	Health Care Worker	Correctional Employee	Migrant Worker	Other Occupation	Multiple Occupations
<b>United States</b>	<b>12,971</b>	<b>12,598</b>	<b>(97.1)</b>	<b>(52.6)</b>	<b>(3.2)</b>	<b>(0.1)</b>	<b>(1.2)</b>	<b>(42.7)</b>	<b>(0.1)</b>
Alabama	191	191	(100.0)	(54.5)	(3.7)	(0.5)	(1.0)	(40.3)	(0.0)
Alaska	63	61	(96.8)	(65.6)	(3.3)	(0.0)	(0.0)	(31.1)	(0.0)
Arizona	274	220	(80.3)	(53.6)	(4.1)	(0.9)	(5.0)	(36.4)	(0.0)
Arkansas	95	82	(86.3)	(90.2)	(0.0)	(0.0)	(0.0)	(9.8)	(0.0)
California	2,646	2,525	(95.4)	(57.4)	(2.7)	(0.0)	(1.9)	(38.0)	(0.0)
Colorado	117	116	(99.1)	(54.3)	(0.9)	(0.0)	(0.9)	(44.0)	(0.0)
Connecticut	85	85	(100.0)	(36.5)	(4.7)	(0.0)	(0.0)	(58.8)	(0.0)
Delaware	27	27	(100.0)	(48.1)	(0.0)	(0.0)	(0.0)	(51.9)	(0.0)
District of Columbia	67	67	(100.0)	(82.1)	(0.0)	(0.0)	(0.0)	(17.9)	(0.0)
Florida	981	977	(99.6)	(41.5)	(2.8)	(0.2)	(3.2)	(52.1)	(0.3)
Georgia	465	430	(92.5)	(32.3)	(3.7)	(0.2)	(0.5)	(63.3)	(0.0)
Hawaii	113	90	(79.6)	(60.0)	(6.7)	(0.0)	(0.0)	(33.3)	(0.0)
Idaho	19	18	(94.7)	(44.4)	(5.6)	(0.0)	(11.1)	(38.9)	(0.0)
Illinois	525	484	(92.2)	(58.7)	(3.7)	(0.2)	(0.0)	(37.4)	(0.0)
Indiana	109	109	(100.0)	(56.0)	(2.8)	(0.0)	(0.0)	(41.3)	(0.0)
Iowa	40	40	(100.0)	(42.5)	(2.5)	(0.0)	(0.0)	(55.0)	(0.0)
Kansas	81	81	(100.0)	(33.3)	(7.4)	(0.0)	(0.0)	(59.3)	(0.0)
Kentucky	84	84	(100.0)	(58.3)	(2.4)	(0.0)	(2.4)	(36.9)	(0.0)
Louisiana	194	184	(94.8)	(48.9)	(1.6)	(1.1)	(0.0)	(48.4)	(0.0)
Maine	15	15	(100.0)	(66.7)	(6.7)	(0.0)	(0.0)	(26.7)	(0.0)
Maryland	245	244	(99.6)	(40.6)	(3.7)	(0.0)	(0.4)	(55.3)	(0.0)
Massachusetts	251	240	(95.6)	(46.3)	(5.0)	(0.0)	(1.3)	(47.5)	(0.0)
Michigan	211	211	(100.0)	(59.7)	(4.7)	(0.0)	(0.0)	(35.5)	(0.0)
Minnesota	193	193	(100.0)	(53.4)	(5.2)	(0.0)	(0.0)	(40.9)	(0.5)
Mississippi	107	107	(100.0)	(59.8)	(1.9)	(0.0)	(1.9)	(36.4)	(0.0)
Missouri	92	91	(98.9)	(50.5)	(6.6)	(0.0)	(0.0)	(42.9)	(0.0)
Montana	13	13	(100.0)	(69.2)	(0.0)	(0.0)	(0.0)	(30.8)	(0.0)
Nebraska	22	22	(100.0)	(36.4)	(0.0)	(0.0)	(0.0)	(63.6)	(0.0)
Nevada	97	95	(97.9)	(34.7)	(3.2)	(0.0)	(0.0)	(62.1)	(0.0)
New Hampshire	15	15	(100.0)	(46.7)	(6.7)	(0.0)	(0.0)	(46.7)	(0.0)
New Jersey	492	492	(100.0)	(49.0)	(3.9)	(0.0)	(0.8)	(45.9)	(0.4)
New Mexico	46	44	(95.7)	(40.9)	(0.0)	(0.0)	(0.0)	(56.8)	(2.3)
New York State <sup>2</sup>	301	290	(96.3)	(45.9)	(5.2)	(0.7)	(0.3)	(47.9)	(0.0)
New York City	916	893	(97.5)	(53.1)	(3.6)	(0.0)	(0.0)	(43.3)	(0.0)
North Carolina	357	356	(99.7)	(52.2)	(2.0)	(0.3)	(2.2)	(43.0)	(0.3)
North Dakota	9	8	(88.9)	(25.0)	(0.0)	(0.0)	(0.0)	(75.0)	(0.0)
Ohio	223	222	(99.6)	(59.0)	(3.6)	(0.9)	(0.9)	(35.6)	(0.0)
Oklahoma	133	133	(100.0)	(58.6)	(2.3)	(0.0)	(0.0)	(38.3)	(0.8)
Oregon	77	76	(98.7)	(55.3)	(3.9)	(0.0)	(5.3)	(35.5)	(0.0)
Pennsylvania	307	304	(99.0)	(35.9)	(2.0)	(0.0)	(0.7)	(61.5)	(0.0)
Rhode Island	23	23	(100.0)	(39.1)	(4.3)	(0.0)	(0.0)	(56.5)	(0.0)
South Carolina	215	214	(99.5)	(54.2)	(1.9)	(0.0)	(2.3)	(41.6)	(0.0)
South Dakota	13	13	(100.0)	(69.2)	(7.7)	(0.0)	(0.0)	(23.1)	(0.0)
Tennessee	261	261	(100.0)	(58.2)	(3.8)	(0.0)	(0.0)	(37.5)	(0.4)
Texas	1,479	1,479	(100.0)	(59.4)	(3.7)	(0.1)	(0.5)	(35.9)	(0.3)
Utah	28	28	(100.0)	(46.4)	(0.0)	(0.0)	(0.0)	(53.6)	(0.0)
Vermont	8	8	(100.0)	(62.5)	(0.0)	(0.0)	(0.0)	(37.5)	(0.0)
Virginia	306	306	(100.0)	(58.8)	(2.0)	(0.0)	(0.7)	(38.6)	(0.0)
Washington	250	246	(98.4)	(46.3)	(3.7)	(0.0)	(1.2)	(48.8)	(0.0)
West Virginia	22	20	(90.9)	(60.0)	(5.0)	(0.0)	(0.0)	(35.0)	(0.0)
Wisconsin	64	61	(95.3)	(44.3)	(3.3)	(0.0)	(1.6)	(50.8)	(0.0)
Wyoming	4	4	(100.0)	(25.0)	(0.0)	(0.0)	(0.0)	(75.0)	(0.0)
American Samoa <sup>3</sup>	...	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>3</sup>	54	49	(90.7)	(79.6)	(0.0)	(0.0)	(0.0)	(20.4)	(0.0)
Guam <sup>3</sup>	44	39	(88.6)	(64.1)	(5.1)	(0.0)	(0.0)	(30.8)	(0.0)
Marshall Islands <sup>3</sup>	24	24	(100.0)	(62.5)	(0.0)	(0.0)	(0.0)	(37.5)	(0.0)
N. Mariana Islands <sup>3</sup>	34	32	(94.1)	(15.6)	(0.0)	(0.0)	(0.0)	(84.4)	(0.0)
Puerto Rico <sup>3</sup>	104	102	(98.1)	(77.5)	(1.0)	(0.0)	(0.0)	(20.6)	(1.0)
Republic of Palau <sup>3</sup>	3	3	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)
U.S. Virgin Islands <sup>3</sup>	...	...	...	...	...	...	...	...	...

<sup>1</sup>Occupation within past 24 months of TB diagnosis. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 39. Tuberculosis Cases and Percentages by Type of Health Care Provider: Reporting Areas, 2004<sup>1</sup>**

Reporting Area	Total Cases	Cases in Persons Alive at Diagnosis	Cases with Information on Type of Health Care Provider		Percentage of Cases by Type of Health Care Provider <sup>2</sup>		
			No.	(%)	Health Department	Private/Other	Both Health Department and Private/Other
<b>United States</b>	<b>14,502</b>	<b>14,209</b>	<b>13,768</b>	<b>(96.9)</b>	<b>(57.1)</b>	<b>(17.8)</b>	<b>(25.1)</b>
Alabama	211	198	198	(100.0)	(70.2)	(4.5)	(25.3)
Alaska	43	42	42	(100.0)	(16.7)	(0.0)	(83.3)
Arizona	272	267	247	(92.5)	(62.8)	(22.7)	(14.6)
Arkansas	133	126	50	(39.7)	--	--	--
California	2,992	2,948	2,930	(99.4)	(52.9)	(29.6)	(17.6)
Colorado	128	126	126	(100.0)	(72.2)	(4.0)	(23.8)
Connecticut	101	98	98	(100.0)	(12.2)	(41.8)	(45.9)
Delaware	33	32	32	(100.0)	(68.8)	(9.4)	(21.9)
District of Columbia	81	80	80	(100.0)	(48.8)	(37.5)	(13.8)
Florida	1,074	1,043	1,039	(99.6)	(72.9)	(13.0)	(14.1)
Georgia	537	526	509	(96.8)	(73.3)	(7.9)	(18.9)
Hawaii	116	113	110	(97.3)	(40.9)	(10.9)	(48.2)
Idaho	11	11	10	(90.9)	(40.0)	(40.0)	(20.0)
Illinois	567	554	552	(99.6)	(45.3)	(24.8)	(29.9)
Indiana	128	126	126	(100.0)	(1.6)	(17.5)	(81.0)
Iowa	47	47	47	(100.0)	(4.3)	(2.1)	(93.6)
Kansas	62	61	61	(100.0)	(36.1)	(8.2)	(55.7)
Kentucky	127	124	124	(100.0)	(62.1)	(13.7)	(24.2)
Louisiana	248	241	217	(90.0)	(57.1)	(7.4)	(35.5)
Maine	20	20	20	(100.0)	(100.0)	(0.0)	(0.0)
Maryland	313	306	302	(98.7)	(86.8)	(6.0)	(7.3)
Massachusetts	283	279	275	(98.6)	(44.0)	(9.5)	(46.5)
Michigan	272	265	262	(98.9)	(63.7)	(17.2)	(19.1)
Minnesota	199	197	197	(100.0)	(52.8)	(43.7)	(3.6)
Mississippi	119	112	112	(100.0)	(98.2)	(1.8)	(0.0)
Missouri	127	122	121	(99.2)	(14.9)	(27.3)	(57.9)
Montana	15	15	15	(100.0)	(40.0)	(0.0)	(60.0)
Nebraska	39	38	38	(100.0)	(0.0)	(31.6)	(68.4)
Nevada	95	93	93	(100.0)	(90.3)	(7.5)	(2.2)
New Hampshire	24	24	24	(100.0)	(0.0)	(4.2)	(95.8)
New Jersey	482	474	474	(100.0)	(66.2)	(29.1)	(4.6)
New Mexico	42	39	38	(97.4)	(63.2)	(23.7)	(13.2)
New York State <sup>3</sup>	323	319	315	(98.7)	(56.5)	(22.5)	(21.0)
New York City	1,037	1,022	1,013	(99.1)	(36.4)	(19.7)	(43.8)
North Carolina	381	372	370	(99.5)	(58.1)	(7.8)	(34.1)
North Dakota	4	4	4	(100.0)	(0.0)	(0.0)	(100.0)
Ohio	219	212	209	(98.6)	(51.7)	(21.5)	(26.8)
Oklahoma	178	176	176	(100.0)	(99.4)	(0.6)	(0.0)
Oregon	106	104	104	(100.0)	(48.1)	(8.7)	(43.3)
Pennsylvania	328	320	317	(99.1)	(77.3)	(20.5)	(2.2)
Rhode Island	51	50	50	(100.0)	(98.0)	(2.0)	(0.0)
South Carolina	233	229	227	(99.1)	(84.1)	(3.5)	(12.3)
South Dakota	11	10	10	(100.0)	(80.0)	(0.0)	(20.0)
Tennessee	278	270	267	(98.9)	(44.6)	(6.4)	(49.1)
Texas	1,672	1,638	1,412	(86.2)	(55.8)	(11.8)	(32.4)
Utah	36	35	35	(100.0)	(22.9)	(5.7)	(71.4)
Vermont	6	6	6	(100.0)	(0.0)	(33.3)	(66.7)
Virginia	329	329	319	(97.0)	(76.8)	(13.5)	(9.7)
Washington	245	243	242	(99.6)	(65.3)	(3.7)	(31.0)
West Virginia	24	24	24	(100.0)	(20.8)	(0.0)	(79.2)
Wisconsin	95	94	94	(100.0)	(2.1)	(1.1)	(96.8)
Wyoming	5	5	5	(100.0)	(0.0)	(60.0)	(40.0)
American Samoa <sup>4</sup>	3	3	0	(0.0)	--	--	--
Fed. States of Micronesia <sup>4</sup>	8	8	3	(37.5)	--	--	--
Guam <sup>4</sup>	51	49	47	(95.9)	(91.5)	(8.5)	(0.0)
Marshall Islands <sup>4</sup>	41	40	36	(90.0)	(100.0)	(0.0)	(0.0)
N. Mariana Islands <sup>4</sup>	55	55	55	(100.0)	(98.2)	(1.8)	(0.0)
Puerto Rico <sup>4</sup>	123	108	108	(100.0)	(87.0)	(10.2)	(2.8)
Republic of Palau <sup>4</sup>	5	5	5	(100.0)	(60.0)	(0.0)	(40.0)
U.S. Virgin Islands <sup>4</sup>	...	...	...	...	...	...	...

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Health Department: All outpatient care provided by the state or local health department; Private/Other: All care (except contact investigation and dispensing of medication) provided by non-health department providers; Both Health Department and Private/Other: Both sectors involved in the care of the patient. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>3</sup>Excludes New York City.

<sup>4</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.



**Table 40. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2004<sup>1</sup>**

Reporting Area	Total Cases	Cases with Initial Drug Regimen Prescribed <sup>2</sup>	Cases with Information on Directly Observed Therapy		Percentage of Cases by Directly Observed Therapy <sup>3</sup>	
			No.	(%)	DOT Only	Both DOT and Self-Administered
<b>United States</b>	<b>14,502</b>	<b>14,078</b>	<b>13,664</b>	<b>(97.1)</b>	<b>(58.9)</b>	<b>(27.5)</b>
Alabama	211	198	198	(100.0)	(15.7)	(83.8)
Alaska	43	42	42	(100.0)	(95.2)	(4.8)
Arizona	272	262	244	(93.1)	(79.9)	(12.7)
Arkansas	133	125	121	(96.8)	(18.2)	(42.1)
California	2,992	2,904	2,879	(99.1)	(61.6)	(20.7)
Colorado	128	126	126	(100.0)	(92.1)	(4.8)
Connecticut	101	97	97	(100.0)	(17.5)	(52.6)
Delaware	33	32	32	(100.0)	(43.8)	(50.0)
District of Columbia	81	80	80	(100.0)	(28.8)	(16.3)
Florida	1,074	1,032	1,027	(99.5)	(54.6)	(39.9)
Georgia	537	519	506	(97.5)	(84.4)	(13.8)
Hawaii	116	113	110	(97.3)	(5.5)	(79.1)
Idaho	11	10	9	(90.0)	(44.4)	(22.2)
Illinois	567	546	545	(99.8)	(55.8)	(20.2)
Indiana	128	126	126	(100.0)	(64.3)	(31.0)
Iowa	47	47	47	(100.0)	(55.3)	(27.7)
Kansas	62	60	59	(98.3)	(94.9)	(3.4)
Kentucky	127	124	124	(100.0)	(62.9)	(29.8)
Louisiana	248	240	215	(89.6)	(83.7)	(7.4)
Maine	20	20	20	(100.0)	(95.0)	(0.0)
Maryland	313	303	301	(99.3)	(85.0)	(11.6)
Massachusetts	283	279	276	(98.9)	(37.0)	(33.0)
Michigan	272	265	262	(98.9)	(19.8)	(30.2)
Minnesota	199	196	196	(100.0)	(79.6)	(18.9)
Mississippi	119	111	111	(100.0)	(43.2)	(56.8)
Missouri	127	122	119	(97.5)	(41.2)	(38.7)
Montana	15	15	15	(100.0)	(80.0)	(6.7)
Nebraska	39	38	38	(100.0)	(63.2)	(5.3)
Nevada	95	92	92	(100.0)	(85.9)	(5.4)
New Hampshire	24	24	24	(100.0)	(54.2)	(37.5)
New Jersey	482	472	471	(99.8)	(42.7)	(24.0)
New Mexico	42	39	37	(94.9)	(97.3)	(2.7)
New York State <sup>4</sup>	323	318	318	(100.0)	(20.1)	(73.6)
New York City	1,037	1,013	1,002	(98.9)	(0.5)	(68.5)
North Carolina	381	372	370	(99.5)	(94.6)	(5.4)
North Dakota	4	4	4	(100.0)	(25.0)	(25.0)
Ohio	219	209	208	(99.5)	(55.8)	(26.9)
Oklahoma	178	176	176	(100.0)	(100.0)	(0.0)
Oregon	106	103	103	(100.0)	(63.1)	(35.9)
Pennsylvania	328	318	310	(97.5)	(60.3)	(23.5)
Rhode Island	51	50	50	(100.0)	(28.0)	(72.0)
South Carolina	233	229	227	(99.1)	(93.8)	(1.8)
South Dakota	11	10	10	(100.0)	(80.0)	(10.0)
Tennessee	278	269	266	(98.9)	(63.2)	(36.1)
Texas	1,672	1,621	1,352	(83.4)	(82.7)	(14.3)
Utah	36	35	35	(100.0)	(97.1)	(2.9)
Vermont	6	6	6	(100.0)	(33.3)	(16.7)
Virginia	329	320	313	(97.8)	(86.6)	(10.2)
Washington	245	243	242	(99.6)	(85.1)	(13.2)
West Virginia	24	24	24	(100.0)	(62.5)	(29.2)
Wisconsin	95	94	94	(100.0)	(36.2)	(53.2)
Wyoming	5	5	5	(100.0)	(20.0)	(60.0)
American Samoa <sup>5</sup>	3	3	0	(0.0)	--	--
Fed. States of Micronesia <sup>5</sup>	8	8	3	(37.5)	--	--
Guam <sup>5</sup>	51	49	47	(95.9)	(4.3)	(95.7)
Marshall Islands <sup>5</sup>	41	39	36	(92.3)	(5.6)	(91.7)
N. Mariana Islands <sup>5</sup>	55	55	55	(100.0)	(92.7)	(5.5)
Puerto Rico <sup>5</sup>	123	108	107	(99.1)	(61.7)	(0.0)
Republic of Palau <sup>5</sup>	5	5	5	(100.0)	(0.0)	(100.0)
U.S. Virgin Islands <sup>5</sup>	...	...	...	...	...	...

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Includes persons alive at diagnosis with an initial drug regimen of one or more drugs prescribed.

<sup>3</sup>Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>4</sup>Excludes New York City.

<sup>5</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 41. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2004<sup>1</sup>**

Reporting Area	Total Cases	Therapy ≤1 Year Indicated <sup>2</sup>			Therapy >1 Year Indicated <sup>3</sup>		All Drug Therapy	
		No. <sup>4</sup>	COT ≤1 Year(%)	COT(%)	No. <sup>4</sup>	COT(%)	No. <sup>4</sup>	COT(%)
<b>United States</b>	<b>14,502</b>	<b>12802</b>	<b>(82.3)</b>	<b>(91.0)</b>	<b>335</b>	<b>(77.9)</b>	<b>13137</b>	<b>(90.7)</b>
Alabama	211	179	(89.9)	(96.6)	8	(100.0)	187	(96.8)
Alaska	43	38	(84.2)	(100.0)	0	...	38	(100.0)
Arizona	272	246	(74.8)	(85.4)	5	(80.0)	251	(85.3)
Arkansas	133	114	(88.6)	(93.0)	3	(66.7)	117	(92.3)
California	2,992	2639	(81.5)	(92.0)	79	(75.9)	2718	(91.6)
Colorado	128	116	(96.6)	(98.3)	4	(100.0)	120	(98.3)
Connecticut	101	85	(77.6)	(95.3)	3	(100.0)	88	(95.5)
Delaware	33	29	(93.1)	(93.1)	0	...	29	(93.1)
District of Columbia	81	66	(93.9)	(98.5)	1	(100.0)	67	(98.5)
Florida	1,074	928	(85.9)	(94.6)	18	(83.3)	946	(94.4)
Georgia	537	458	(83.2)	(91.7)	11	(90.9)	469	(91.7)
Hawaii	116	108	(79.6)	(88.9)	1	(100.0)	109	(89.0)
Idaho	11	10	(80.0)	(80.0)	0	...	10	(80.0)
Illinois	567	505	(79.6)	(93.3)	8	(62.5)	513	(92.8)
Indiana	128	111	(93.7)	(98.2)	0	...	111	(98.2)
Iowa	47	47	(76.6)	(91.5)	0	...	47	(91.5)
Kansas	62	57	(84.2)	(89.5)	1	(100.0)	58	(89.7)
Kentucky	127	110	(87.3)	(98.2)	2	(100.0)	112	(98.2)
Louisiana	248	231	--	--	1	--	232	--
Maine	20	18	(66.7)	(94.4)	0	...	18	(94.4)
Maryland	313	279	(90.7)	(97.1)	6	(100.0)	285	(97.2)
Massachusetts	283	256	(76.6)	(93.4)	5	(100.0)	261	(93.5)
Michigan	272	239	(87.0)	(93.7)	6	(83.3)	245	(93.5)
Minnesota	199	187	(90.9)	(95.7)	5	(80.0)	192	(95.3)
Mississippi	119	101	(83.2)	(94.1)	5	(80.0)	106	(93.4)
Missouri	127	111	(82.0)	(89.2)	1	(100.0)	112	(89.3)
Montana	15	14	(92.9)	(100.0)	0	...	14	(100.0)
Nebraska	39	37	(86.5)	(94.6)	0	...	37	(94.6)
Nevada	95	88	(90.9)	(93.2)	2	(100.0)	90	(93.3)
New Hampshire	24	21	(100.0)	(100.0)	2	(100.0)	23	(100.0)
New Jersey	482	429	(82.3)	(92.8)	14	(71.4)	443	(92.1)
New Mexico	42	33	(84.8)	(93.9)	2	(50.0)	35	(91.4)
New York State <sup>5</sup>	323	293	(86.3)	(97.3)	10	(80.0)	303	(96.7)
New York City	1,037	901	(84.5)	(90.9)	40	(62.5)	941	(89.7)
North Carolina	381	332	(92.5)	(96.7)	10	(80.0)	342	(96.2)
North Dakota	4	4	(100.0)	(100.0)	0	...	4	(100.0)
Ohio	219	190	(87.9)	(92.6)	3	(100.0)	193	(92.7)
Oklahoma	178	164	(80.5)	(95.1)	2	(100.0)	166	(95.2)
Oregon	106	97	(89.7)	(92.8)	0	...	97	(92.8)
Pennsylvania	328	280	--	--	8	--	288	--
Rhode Island	51	49	(85.7)	(91.8)	0	...	49	(91.8)
South Carolina	233	213	(82.6)	(90.6)	1	(100.0)	214	(90.7)
South Dakota	11	9	(44.4)	(88.9)	0	...	9	(88.9)
Tennessee	278	237	(85.7)	(93.2)	2	(100.0)	239	(93.3)
Texas	1,672	1472	--	--	49	--	1521	--
Utah	36	32	(96.9)	(100.0)	2	(100.0)	34	(100.0)
Vermont	6	6	(66.7)	(83.3)	0	...	6	(83.3)
Virginia	329	292	(88.4)	(92.1)	7	(85.7)	299	(92.0)
Washington	245	226	(88.1)	(95.6)	7	(85.7)	233	(95.3)
West Virginia	24	21	(81.0)	(100.0)	1	(100.0)	22	(100.0)
Wisconsin	95	89	(79.8)	(92.1)	0	...	89	(92.1)
Wyoming	5	5	(100.0)	(100.0)	0	...	5	(100.0)
American Samoa <sup>6</sup>	...	...	...	...	...	...	...	...
Fed. States of Micronesia <sup>6</sup>	...	...	...	...	...	...	...	...
Guam <sup>6</sup>	51	45	(84.4)	(86.7)	0	...	45	(86.7)
Marshall Islands <sup>6</sup>	...	...	...	...	...	...	...	...
N. Mariana Islands <sup>6</sup>	...	...	...	...	...	...	...	...
Puerto Rico <sup>6</sup>	123	89	(79.8)	(92.1)	1	(100.0)	90	(92.2)
Republic of Palau <sup>6</sup>	...	...	...	...	...	...	...	...
U.S. Virgin Islands <sup>5</sup>	...	...	...	...	...	...	...	...

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Initial isolate susceptible to rifampin (n=9,699) or susceptibility unknown (n=157); culture negative (n=2,418); culture status unknown (n=656); age unknown (n=1).

<sup>3</sup>Initial isolate rifampin resistant, or pediatric patients (aged <15) with meningeal, bone, joint, or miliary disease.

<sup>4</sup>Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die during therapy. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥90% of cases.

<sup>5</sup>Excludes New York City.

<sup>6</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available. See Technical Notes for description of Completion of Therapy calculation (page 9).

**Table 42. Tuberculosis Cases and Percentages by Reason Therapy Stopped:  
Reporting Areas, 2004<sup>1</sup>**

Reporting Area	Cases with Initial Drug Regimen Prescribed <sup>2</sup>		Completed		Moved		Lost		Refused		Died <sup>3</sup>		Unknown <sup>4</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>United States</b>	<b>14,078</b>		<b>11,910</b>	<b>(84.6)</b>	<b>348</b>	<b>(2.5)</b>	<b>322</b>	<b>(2.3)</b>	<b>79</b>	<b>(0.6)</b>	<b>941</b>	<b>(6.7)</b>	<b>478</b>	<b>(3.4)</b>
Alabama	198		181	(91.4)	2	(1.0)	2	(1.0)	1	(0.5)	11	(5.6)	1	(0.5)
Alaska	42		38	(90.5)	0	(0.0)	0	(0.0)	0	(0.0)	4	(9.5)	0	(0.0)
Arizona	262		214	(81.7)	5	(1.9)	15	(5.7)	2	(0.8)	11	(4.2)	15	(5.7)
Arkansas	125		108	(86.4)	1	(0.8)	3	(2.4)	0	(0.0)	8	(6.4)	5	(4.0)
California	2,904		2,489	(85.7)	125	(4.3)	64	(2.2)	10	(0.3)	186	(6.4)	30	(1.0)
Colorado	126		118	(93.7)	0	(0.0)	1	(0.8)	0	(0.0)	6	(4.8)	1	(0.8)
Connecticut	97		84	(86.6)	4	(4.1)	0	(0.0)	0	(0.0)	9	(9.3)	0	(0.0)
Delaware	32		27	(84.4)	1	(3.1)	0	(0.0)	1	(3.1)	3	(9.4)	0	(0.0)
District of Columbia	80		66	(82.5)	1	(1.3)	0	(0.0)	0	(0.0)	13	(16.3)	0	(0.0)
Florida	1,032		893	(86.5)	28	(2.7)	20	(1.9)	1	(0.1)	86	(8.3)	4	(0.4)
Georgia	519		430	(82.9)	12	(2.3)	12	(2.3)	9	(1.7)	50	(9.6)	6	(1.2)
Hawaii	113		97	(85.8)	4	(3.5)	2	(1.8)	1	(0.9)	4	(3.5)	5	(4.4)
Idaho	10		8	(80.0)	1	(10.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(10.0)
Illinois	546		476	(87.2)	14	(2.6)	12	(2.2)	3	(0.5)	33	(6.0)	8	(1.5)
Indiana	126		109	(86.5)	0	(0.0)	2	(1.6)	0	(0.0)	15	(11.9)	0	(0.0)
Iowa	47		43	(91.5)	2	(4.3)	1	(2.1)	1	(2.1)	0	(0.0)	0	(0.0)
Kansas	60		52	(86.7)	2	(3.3)	3	(5.0)	0	(0.0)	2	(3.3)	1	(1.7)
Kentucky	124		110	(88.7)	0	(0.0)	1	(0.8)	0	(0.0)	12	(9.7)	1	(0.8)
Louisiana	240		181	(75.4)	5	(2.1)	12	(5.0)	0	(0.0)	8	(3.3)	34	(14.2)
Maine	20		17	(85.0)	0	(0.0)	1	(5.0)	0	(0.0)	2	(10.0)	0	(0.0)
Maryland	303		277	(91.4)	3	(1.0)	2	(0.7)	2	(0.7)	18	(5.9)	1	(0.3)
Massachusetts	279		244	(87.5)	6	(2.2)	9	(3.2)	0	(0.0)	18	(6.5)	2	(0.7)
Michigan	265		229	(86.4)	2	(0.8)	5	(1.9)	6	(2.3)	20	(7.5)	3	(1.1)
Minnesota	196		183	(93.4)	4	(2.0)	1	(0.5)	4	(2.0)	4	(2.0)	0	(0.0)
Mississippi	111		99	(89.2)	5	(4.5)	0	(0.0)	0	(0.0)	5	(4.5)	2	(1.8)
Missouri	122		100	(82.0)	5	(4.1)	2	(1.6)	4	(3.3)	10	(8.2)	1	(0.8)
Montana	15		14	(93.3)	0	(0.0)	0	(0.0)	0	(0.0)	1	(6.7)	0	(0.0)
Nebraska	38		35	(92.1)	2	(5.3)	0	(0.0)	0	(0.0)	1	(2.6)	0	(0.0)
Nevada	92		84	(91.3)	5	(5.4)	1	(1.1)	0	(0.0)	2	(2.2)	0	(0.0)
New Hampshire	24		23	(95.8)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.2)	0	(0.0)
New Jersey	472		408	(86.4)	3	(0.6)	30	(6.4)	1	(0.2)	29	(6.1)	1	(0.2)
New Mexico	39		32	(82.1)	0	(0.0)	0	(0.0)	2	(5.1)	4	(10.3)	1	(2.6)
New York State <sup>5</sup>	318		293	(92.1)	1	(0.3)	5	(1.6)	2	(0.6)	15	(4.7)	2	(0.6)
New York City	1,013		844	(83.3)	24	(2.4)	22	(2.2)	7	(0.7)	72	(7.1)	44	(4.3)
North Carolina	372		329	(88.4)	1	(0.3)	10	(2.7)	0	(0.0)	30	(8.1)	2	(0.5)
North Dakota	4		4	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Ohio	209		179	(85.6)	4	(1.9)	5	(2.4)	2	(1.0)	16	(7.7)	3	(1.4)
Oklahoma	176		158	(89.8)	6	(3.4)	2	(1.1)	0	(0.0)	10	(5.7)	0	(0.0)
Oregon	103		90	(87.4)	1	(1.0)	3	(2.9)	0	(0.0)	6	(5.8)	3	(2.9)
Pennsylvania	318		223	(70.1)	9	(2.8)	10	(3.1)	1	(0.3)	30	(9.4)	45	(14.2)
Rhode Island	50		45	(90.0)	3	(6.0)	1	(2.0)	0	(0.0)	1	(2.0)	0	(0.0)
South Carolina	229		194	(84.7)	6	(2.6)	4	(1.7)	6	(2.6)	15	(6.6)	4	(1.7)
South Dakota	10		8	(80.0)	0	(0.0)	1	(10.0)	0	(0.0)	1	(10.0)	0	(0.0)
Tennessee	269		223	(82.9)	1	(0.4)	5	(1.9)	4	(1.5)	30	(11.2)	6	(2.2)
Texas	1,621		1,206	(74.4)	39	(2.4)	31	(1.9)	4	(0.2)	100	(6.2)	241	(14.9)
Utah	35		34	(97.1)	0	(0.0)	0	(0.0)	0	(0.0)	1	(2.9)	0	(0.0)
Vermont	6		5	(83.3)	0	(0.0)	0	(0.0)	1	(16.7)	0	(0.0)	0	(0.0)
Virginia	320		275	(85.9)	8	(2.5)	14	(4.4)	1	(0.3)	21	(6.6)	1	(0.3)
Washington	243		222	(91.4)	3	(1.2)	4	(1.6)	1	(0.4)	10	(4.1)	3	(1.2)
West Virginia	24		22	(91.7)	0	(0.0)	0	(0.0)	0	(0.0)	2	(8.3)	0	(0.0)
Wisconsin	94		82	(87.2)	0	(0.0)	4	(4.3)	2	(2.1)	5	(5.3)	1	(1.1)
Wyoming	5		5	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
American Samoa <sup>6</sup>	3		0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(100.0)
Fed. States of Micronesia <sup>6</sup>	8		2	(25.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(12.5)	5	(62.5)
Guam <sup>6</sup>	49		39	(79.6)	2	(4.1)	0	(0.0)	0	(0.0)	4	(8.2)	4	(8.2)
Marshall Islands <sup>6</sup>	39		34	(87.2)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(12.8)
N. Mariana Islands <sup>6</sup>	55		49	(89.1)	6	(10.9)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Puerto Rico <sup>6</sup>	108		83	(76.9)	0	(0.0)	5	(4.6)	1	(0.9)	18	(16.7)	1	(0.9)
Republic of Palau <sup>6</sup>	5		4	(80.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(20.0)
U.S. Virgin Islands <sup>6</sup>	...		...	...	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia).

<sup>3</sup>Died = Died of any cause.

<sup>4</sup>Includes cases reported as Other, Missing, or Unknown.

<sup>5</sup>Excludes New York City.

<sup>6</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Ellipses indicate data not available.

**Table 43. Completion of Tuberculosis Therapy (COT) Cases and Percentages<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2004<sup>2</sup>**

Reporting Area	Total Cases <sup>3</sup>	Hispanic <sup>4</sup>		Non-Hispanic									
				American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Unknown or Missing	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
United States	12,802	3,768	(80.0)	138	(81.9)	3,107	(83.2)	3,508	(82.9)	2,227	(83.8)	54	(85.2)
Alabama	179	15	(80.0)	0	...	17	(94.1)	95	(89.5)	52	(92.3)	0	...
Alaska	38	0	...	27	(85.2)	7	(71.4)	2	(100.0)	1	(100.0)	1	(100.0)
Arizona	246	133	(68.4)	15	(66.7)	26	(92.3)	27	(88.9)	44	(79.5)	1	(0.0)
Arkansas	114	21	(76.2)	2	(100.0)	29	(89.7)	22	(95.5)	39	(89.7)	1	(100.0)
California	2,639	1,051	(78.5)	4	(100.0)	1,140	(83.7)	187	(81.3)	248	(83.9)	9	(88.9)
Colorado	116	49	(100.0)	1	(0.0)	13	(100.0)	34	(94.1)	19	(94.7)	0	...
Connecticut	85	28	(89.3)	0	...	22	(77.3)	17	(52.9)	18	(83.3)	0	...
Delaware	29	7	(100.0)	0	...	6	(83.3)	12	(100.0)	4	(75.0)	0	...
District of Columbia	66	10	(90.0)	0	...	6	(100.0)	44	(93.2)	5	(100.0)	1	(100.0)
Florida	928	263	(84.4)	2	(50.0)	67	(85.1)	372	(86.0)	221	(87.8)	3	(100.0)
Georgia	458	83	(81.9)	0	...	45	(75.6)	264	(84.1)	64	(87.5)	2	(50.0)
Hawaii	108	3	(66.7)	0	...	101	(81.2)	0	...	4	(50.0)	0	...
Idaho	10	4	(50.0)	0	...	0	...	1	(100.0)	5	(100.0)	0	...
Illinois	505	141	(80.9)	2	(50.0)	116	(81.0)	166	(74.7)	75	(85.3)	5	(100.0)
Indiana	111	19	(94.7)	1	(100.0)	16	(93.8)	39	(92.3)	36	(94.4)	0	...
Iowa	47	9	(77.8)	0	...	11	(100.0)	12	(58.3)	15	(73.3)	0	...
Kansas	57	26	(84.6)	0	...	9	(100.0)	12	(75.0)	10	(80.0)	0	...
Kentucky	110	21	(76.2)	0	...	5	(100.0)	15	(100.0)	69	(87.0)	0	...
Louisiana	231	10	(70.0)	0	...	23	(60.9)	137	(71.5)	61	(65.6)	0	...
Maine	18	0	...	0	...	1	(100.0)	7	(57.1)	9	(66.7)	1	(100.0)
Maryland	279	37	(81.1)	0	...	72	(95.8)	139	(90.6)	31	(90.3)	0	...
Massachusetts	256	47	(80.9)	1	(100.0)	96	(76.0)	61	(78.7)	51	(70.6)	0	...
Michigan	239	29	(82.8)	0	...	51	(88.2)	101	(82.2)	57	(96.5)	1	(100.0)
Minnesota	187	26	(88.5)	7	(85.7)	36	(94.4)	98	(90.8)	20	(90.0)	0	...
Mississippi	101	5	(20.0)	1	(100.0)	4	(50.0)	66	(86.4)	25	(92.0)	0	...
Missouri	111	13	(84.6)	0	...	14	(92.9)	41	(75.6)	43	(83.7)	0	...
Montana	14	1	(100.0)	5	(100.0)	1	(100.0)	0	...	6	(83.3)	1	(100.0)
Nebraska	37	12	(83.3)	1	(100.0)	4	(75.0)	11	(90.9)	7	(85.7)	2	(100.0)
Nevada	88	32	(87.5)	3	(100.0)	15	(93.3)	12	(100.0)	26	(88.5)	0	...
New Hampshire	21	5	(100.0)	0	...	8	(100.0)	4	(100.0)	4	(100.0)	0	...
New Jersey	429	150	(88.0)	0	...	143	(76.2)	92	(81.5)	44	(84.1)	0	...
New Mexico	33	19	(84.2)	9	(88.9)	0	...	0	...	5	(80.0)	0	...
New York City	901	278	(85.6)	0	...	274	(85.4)	272	(82.7)	71	(83.1)	6	(83.3)
New York State <sup>5</sup>	293	87	(85.1)	0	...	70	(85.7)	72	(84.7)	63	(90.5)	1	(100.0)
North Carolina	332	88	(86.4)	4	(100.0)	38	(97.4)	136	(94.9)	66	(92.4)	0	...
North Dakota	4	0	...	1	(100.0)	1	(100.0)	0	...	2	(100.0)	0	...
Ohio	190	23	(87.0)	0	...	31	(77.4)	73	(94.5)	61	(85.2)	2	(100.0)
Oklahoma	164	27	(70.4)	32	(84.4)	18	(77.8)	30	(86.7)	53	(81.1)	4	(75.0)
Oregon	97	23	(95.7)	1	(100.0)	31	(93.5)	14	(85.7)	28	(82.1)	0	...
Pennsylvania	280	30	(50.0)	0	...	100	(66.0)	87	(62.1)	63	(77.8)	0	...
Rhode Island	49	17	(82.4)	0	...	7	(85.7)	12	(83.3)	13	(92.3)	0	...
South Carolina	213	34	(73.5)	0	...	18	(72.2)	125	(84.8)	36	(88.9)	0	...
South Dakota	9	2	(50.0)	4	(25.0)	0	...	0	...	3	(66.7)	0	...
Tennessee	237	26	(84.6)	0	...	16	(87.5)	106	(82.1)	89	(89.9)	0	...
Texas	1,472	730	(73.4)	1	(0.0)	180	(75.0)	337	(74.8)	218	(68.8)	6	(50.0)
Utah	32	10	(100.0)	1	(100.0)	8	(100.0)	5	(80.0)	8	(100.0)	0	...
Vermont	6	0	...	0	...	1	(100.0)	2	(50.0)	3	(66.7)	0	...
Virginia	292	73	(91.8)	1	(0.0)	90	(90.0)	84	(81.0)	42	(95.2)	2	(100.0)
Washington	226	26	(92.3)	11	(90.9)	90	(87.8)	47	(87.2)	47	(85.1)	5	(100.0)
West Virginia	21	2	(100.0)	0	...	0	...	2	(100.0)	17	(76.5)	0	...
Wisconsin	89	21	(81.0)	1	(100.0)	29	(82.8)	14	(85.7)	24	(70.8)	0	...
Wyoming	5	2	(100.0)	0	...	1	(100.0)	0	...	2	(100.0)	0	...
American Samoa <sup>6</sup>	3	0	...	0	...	3	(0.0)	0	...	0	...	0	...
Fed. States of Micronesia <sup>6</sup>	5	0	...	0	...	5	(40.0)	0	...	0	...	0	...
Guam <sup>6</sup>	45	0	...	0	...	37	(91.9)	0	...	0	...	8	(50.0)
Marshall Islands <sup>6</sup>	38	0	...	0	...	35	(80.0)	0	...	0	...	3	(33.3)
N. Mariana Islands <sup>6</sup>	54	0	...	0	...	53	(86.8)	0	...	0	...	1	(100.0)
Puerto Rico <sup>6</sup>	89	88	(79.5)	0	...	1	(100.0)	0	...	0	...	0	...
Republic of Palau <sup>6</sup>	5	0	...	0	...	5	(80.0)	0	...	0	...	0	...
U.S. Virgin Islands <sup>6</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Percentages shown only for reporting areas with information reported for ≥90% of cases, and indicate the percentage of those who completed therapy within 1 year.

<sup>2</sup>Most recent year for which data are available.

<sup>3</sup>Therapy < 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die during therapy.

<sup>4</sup>Persons of Hispanic or Latino origin may be of any race.

<sup>5</sup>Excludes New York City.

<sup>6</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

**Note:** Case counts and percentage for race categories do not include persons of Hispanic ethnicity. Ellipses indicate data not available.

See Technical Notes for description of Completion of Therapy calculation (page 9).

**Table 44. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2000–2004<sup>1</sup>**

Reporting Area	Year									
	2000		2001		2002		2003		2004	
	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>	No. <sup>2</sup>	(%) <sup>3</sup>
<b>United States</b>	<b>14,139</b>	<b>(81.5)</b>	<b>13,922</b>	<b>(81.5)</b>	<b>13,130</b>	<b>(82.1)</b>	<b>13,069</b>	<b>(82.7)</b>	<b>12,802</b>	<b>(82.3)</b>
Alabama	258	(88.8)	223	(81.2)	201	(90.0)	232	(86.6)	179	(89.9)
Alaska	105	(89.5)	50	(88.0)	45	(91.1)	51	(92.2)	38	(84.2)
Arizona	228	(78.1)	251	(82.1)	222	(80.2)	260	(79.6)	246	(74.8)
Arkansas	175	(84.0)	138	(92.0)	114	(86.8)	116	(87.1)	114	(88.6)
California	2,912	(80.1)	2,938	(80.9)	2,791	(82.7)	2,839	(81.4)	2,639	(81.5)
Colorado	80	(95.0)	125	(92.0)	96	(84.4)	102	(93.1)	116	(96.6)
Connecticut	91	(69.2)	112	(73.2)	89	(70.8)	100	(76.0)	85	(77.6)
Delaware	21	(81.0)	30	(93.3)	22	(90.9)	28	(85.7)	29	(93.1)
District of Columbia	70	(80.0)	62	(85.5)	75	(98.7)	68	(91.2)	66	(93.9)
Florida	994	(81.8)	1,007	(81.6)	931	(82.3)	917	(85.9)	928	(85.9)
Georgia	591	(82.1)	500	(82.6)	456	(78.9)	480	(79.6)	458	(83.2)
Hawaii	117	(75.2)	138	(74.6)	136	(69.9)	99	(78.8)	108	(79.6)
Idaho	13	(53.8)	7	(71.4)	12	(58.3)	13	(84.6)	10	(80.0)
Illinois	630	(83.8)	633	(78.2)	577	(77.6)	563	(80.8)	505	(79.6)
Indiana	119	(89.9)	97	(92.8)	105	(96.2)	118	(95.8)	111	(93.7)
Iowa	38	(89.5)	36	(77.8)	33	(81.8)	37	(91.9)	47	(76.6)
Kansas	70	(82.9)	70	(72.9)	73	(83.6)	64	(78.1)	57	(84.2)
Kentucky	117	(88.0)	131	(87.8)	129	(85.3)	120	(85.8)	110	(87.3)
Louisiana	284	(78.5)	259	(74.5)	207	(81.6)	219	(81.7)	231	(68.8)
Maine	22	(72.7)	19	(94.7)	18	(77.8)	23	(69.6)	18	(66.7)
Maryland	253	(85.0)	230	(90.0)	261	(87.7)	239	(87.9)	279	(90.7)
Massachusetts	258	(85.3)	247	(77.3)	254	(76.8)	243	(80.2)	256	(76.6)
Michigan	244	(83.6)	271	(81.9)	261	(82.0)	205	(84.9)	239	(87.0)
Minnesota	169	(85.8)	218	(84.9)	218	(85.3)	200	(89.5)	187	(90.9)
Mississippi	153	(84.3)	137	(83.9)	112	(83.0)	112	(71.4)	101	(83.2)
Missouri	181	(83.4)	137	(84.7)	114	(86.0)	105	(73.3)	111	(82.0)
Montana	19	(89.5)	17	(94.1)	10	(90.0)	5	(100.0)	14	(92.9)
Nebraska	22	(63.6)	31	(83.9)	23	(69.6)	25	(68.0)	37	(86.5)
Nevada	90	(84.4)	87	(81.6)	70	(98.6)	96	(91.7)	88	(90.9)
New Hampshire	22	(77.3)	19	(89.5)	18	(88.9)	13	(92.3)	21	(100.0)
New Jersey	473	(76.1)	456	(76.5)	474	(79.1)	450	(81.8)	429	(82.3)
New Mexico	37	(70.3)	44	(86.4)	49	(83.7)	37	(86.5)	33	(84.8)
New York City	1,111	(84.1)	1,049	(85.5)	910	(86.2)	982	(86.5)	901	(84.5)
New York State <sup>4</sup>	353	(80.7)	369	(83.2)	314	(77.1)	296	(82.8)	293	(86.3)
North Carolina	388	(91.0)	339	(88.8)	366	(90.7)	323	(89.5)	332	(92.5)
North Dakota	5	(100.0)	5	(100.0)	6	(100.0)	4	(50.0)	4	(100.0)
Ohio	297	(74.4)	256	(79.7)	219	(80.4)	193	(90.7)	190	(87.9)
Oklahoma	128	(84.4)	160	(80.6)	168	(85.7)	137	(70.1)	164	(80.5)
Oregon	111	(80.2)	111	(88.3)	101	(88.1)	96	(84.4)	97	(89.7)
Pennsylvania	334	(74.6)	277	(76.9)	299	(75.6)	288	(79.5)	280	(65.7)
Rhode Island	43	(76.7)	60	(73.3)	44	(68.2)	40	(90.0)	49	(85.7)
South Carolina	244	(77.9)	227	(85.0)	222	(80.2)	232	(86.6)	213	(82.6)
South Dakota	12	(75.0)	12	(66.7)	9	(88.9)	16	(68.8)	9	(44.4)
Tennessee	322	(80.4)	263	(85.2)	277	(84.1)	237	(81.0)	237	(85.7)
Texas	1,310	(79.8)	1,426	(76.6)	1,342	(76.5)	1,389	(76.7)	1,472	(73.1)
Utah	40	(75.0)	31	(83.9)	30	(93.3)	35	(97.1)	32	(96.9)
Vermont	2	(100.0)	7	(100.0)	8	(87.5)	8	(100.0)	6	(66.7)
Virginia	253	(87.0)	267	(81.6)	285	(86.7)	299	(87.3)	292	(88.4)
Washington	231	(82.3)	240	(85.0)	238	(83.2)	234	(82.5)	226	(88.1)
West Virginia	24	(54.2)	25	(64.0)	26	(65.4)	17	(70.6)	21	(81.0)
Wisconsin	73	(83.6)	75	(81.3)	67	(83.6)	61	(86.9)	89	(79.8)
Wyoming	2	(100.0)	3	(100.0)	3	(100.0)	3	(100.0)	5	(100.0)
American Samoa <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	3	(0.0)
Fed. States of Micronesia <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	5	(40.0)
Guam <sup>5</sup>	47	(93.6)	54	(75.9)	79	(51.9)	58	(87.9)	45	(84.4)
Marshall Islands <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	38	(76.3)
N. Mariana Islands <sup>5</sup>	72	(83.3)	50	(88.0)	50	(70.0)	42	(78.6)	54	(87.0)
Puerto Rico <sup>5</sup>	126	(87.3)	92	(92.4)	93	(79.6)	89	(70.8)	89	(79.8)
Republic of Palau <sup>5</sup>	0	(0.0)	0	(0.0)	0	(0.0)	7	(57.1)	5	(80.0)
U.S. Virgin Islands <sup>5</sup>	...	...	...	...	...	...	...	...	...	...

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Total cases for which therapy less than 1 year indicated in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die during therapy.

<sup>3</sup>Percentage of total cases in persons who completed therapy for whom therapy less than 1 year was indicated.

<sup>4</sup>Excludes New York City.

<sup>5</sup>Not included in U.S. totals. Data for 2006 are interim as of April 6, 2007.

See Technical Notes for description of Completion of Therapy calculation (page 9).



# **Morbidity Tables**

## **Cities and Metropolitan Statistical Areas, 2006**



**Table 45. Tuberculosis Cases in Selected Cities<sup>1</sup>: 2006 and 2005**

City	Cases <sup>2</sup>	
	2006	2005
Albuquerque, NM	9	9
Anaheim, CA	28	24
Arlington, TX	19	28
Atlanta, GA	38	36
Austin, TX	38	47
Baltimore, MD	35	68
Birmingham, AL	18	15
Boston, MA	61	57
Buffalo, NY	6	8
Charlotte, NC	50	46
Chicago, IL	290	328
Cincinnati, OH	22	20
Cleveland, OH	22	46
Colorado Springs, CO	6	8
Columbus, OH	74	74
Corpus Christi, TX	34	22
Dallas, TX	169	154
Denver, CO	46	48
Detroit, MI	59	84
El Paso, TX	65	45
Fort Worth, TX	62	81
Fresno, CA	35	45
Honolulu, HI	49	46
Houston, TX	377	341
Indianapolis, IN	47	45
Jacksonville, FL	87	77
Kansas City, MO	23	23
Las Vegas, NV	72	74
Long Beach, CA	38	53
Los Angeles, CA	333	349
Louisville, KY	18	25
Memphis, TN	101	87
Mesa, AZ	16	15
Miami, FL	127	97
Milwaukee, WI	21	22
Minneapolis, MN	63	54
Nashville, TN	49	53
Newark, NJ	41	47
New Orleans, LA	30	61
New York, NY	954	984
Norfolk, VA	7	23
Oakland, CA	50	46
Oklahoma City, OK	28	35
Omaha, NE	9	16
Philadelphia, PA	143	116
Phoenix, AZ	100	100
Pittsburgh, PA	7	11
Portland, OR	29	39
Sacramento, CA	67	122
St. Louis, MO	30	29
St. Paul, MN	42	30
San Antonio, TX	89	73
San Diego, CA	202	165
San Francisco, CA	120	132
San Jose, CA	155	126
Santa Ana, CA	38	34
Seattle, WA	86	73
Tampa, FL	56	69
Toledo, OH	5	11
Tucson, AZ	29	24
Tulsa, OK	20	21
Virginia Beach, VA	11	12
Washington, DC	72	55
Wichita, KS	23	18
<b>TOTAL - 64 CITIES</b>	<b>5,050</b>	<b>5,126</b>
San Juan, PR	9	13

<sup>1</sup>Historical list of cities.

<sup>2</sup>Case counts are based on verified cases in persons residing within city limits.  
Residence within city limits was determined by the health department.



**Table 46. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006 and 2005**

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2006
	2006	2005	2006	2005	
Akron, OH	5	10	(0.7)	(1.4)	700,943
Albany-Schenectady-Troy, NY	17	16	(2.0)	(1.9)	850,957
Albuquerque, NM	12	13	(1.5)	(1.6)	816,811
Allentown-Bethlehem-Easton, PA-NJ	22	13	(2.7)	(1.6)	800,336
Atlanta-Sandy Springs-Marietta, GA	280	296	(5.4)	(6.0)	5,138,223
Augusta-Richmond County, GA-SC	35	30	(6.7)	(5.8)	523,249
Austin-Round Rock, TX	52	57	(3.4)	(3.9)	1,513,565
Bakersfield, CA	40	42	(5.1)	(5.5)	780,117
Baltimore-Towson, MD	83	122	(3.1)	(4.6)	2,658,405
Baton Rouge, LA	17	17	(2.2)	(2.3)	766,514
Birmingham-Hoover, AL	44	44	(4.0)	(4.0)	1,100,019
Boise City-Nampa, ID	5	11	(0.9)	(2.0)	567,640
Boston-Cambridge-Quincy, MA-NH	176	169	(4.0)	(3.8)	4,455,217
Bridgeport-Stamford-Norwalk, CT	33	39	(3.7)	(4.3)	900,440
Buffalo-Niagara Falls, NY	15	13	(1.3)	(1.1)	1,137,520
Cape Coral-Fort Myers, FL	19	16	(3.3)	(2.9)	571,344
Charleston-North Charleston, SC	34	44	(5.6)	(7.4)	603,178
Charlotte-Gastonia-Concord, NC-SC	81	72	(5.1)	(4.7)	1,583,016
Chicago-Naperville-Joliet, IL	522	564	(5.5)	(6.0)	9,505,748
Cincinnati-Middletown, OH-KY-IN	36	42	(1.7)	(2.0)	2,104,218
Cleveland-Elyria-Mentor, OH	47	69	(2.2)	(3.2)	2,114,155
Colorado Springs, CO	10	9	(1.7)	(1.5)	599,127
Columbia, SC	20	14	(2.8)	(2.0)	703,771
Columbus, OH	90	82	(5.2)	(4.8)	1,725,570
Dallas-Fort Worth-Arlington, TX	422	402	(7.0)	(6.9)	6,003,967
Dayton, OH	15	7	(1.8)	(0.8)	838,940
Denver-Aurora, CO	85	71	(3.5)	(3.0)	2,408,750
Des Moines-West Des Moines, IA	15	13	(2.8)	(2.5)	534,230
Detroit-Warren-Livonia, MI	131	170	(2.9)	(3.8)	4,468,966
El Paso, TX	72	49	(9.8)	(6.8)	736,310
Fresno, CA	62	69	(7.0)	(7.9)	891,756
Grand Rapids-Wyoming, MI	22	13	(2.8)	(1.7)	774,084
Greensboro-High Point, NC	42	32	(6.1)	(4.7)	685,378
Greenville, SC	11	6	(1.8)	(1.0)	601,986
Harrisburg-Carlisle, PA	5	23	(1.0)	(4.4)	525,380
Hartford-West Hartford-East Hartford, CT	20	26	(1.7)	(2.2)	1,188,841
Honolulu, HI	95	83	(10.4)	(9.2)	909,863
Houston-Sugar Land-Baytown, TX	473	454	(8.5)	(8.5)	5,539,949
Indianapolis-Carmel, IN	51	52	(3.1)	(3.2)	1,666,032
Jackson, MS	31	24	(5.9)	(4.6)	529,456
Jacksonville, FL	96	93	(7.5)	(7.5)	1,277,997
Kansas City, MO-KS	50	47	(2.5)	(2.4)	1,967,405
Knoxville, TN	15	14	(2.2)	(2.1)	667,384
Lakeland, FL	31	53	(5.5)	(9.8)	561,606
Las Vegas-Paradise, NV	89	90	(5.0)	(5.3)	1,777,539
Little Rock-North Little Rock, AR	11	22	(1.7)	(3.4)	652,834
Los Angeles-Long Beach-Santa Ana, CA	1,157	1,215	(8.9)	(9.4)	12,950,129
Louisville-Jefferson County, KY-IN	28	38	(2.3)	(3.1)	1,222,216
Madison, WI	11	16	(2.0)	(3.0)	543,022
McAllen-Edinburg-Mission, TX	68	92	(9.7)	(13.6)	700,634
Memphis, TN-MS-AR	121	97	(9.5)	(7.7)	1,274,704
Miami-Fort Lauderdale-Miami Beach, FL	369	420	(6.8)	(7.7)	5,463,857
Milwaukee-Waukesha-West Allis, WI	33	35	(2.2)	(2.3)	1,509,981
Minneapolis-St. Paul-Bloomington, MN-WI	169	167	(5.3)	(5.3)	3,175,041

**Table 46. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006 and 2005**

Metropolitan Statistical Area	Cases		Case Rates		Population Estimates 2006
	2006	2005	2006	2005	
Modesto, CA	16	11	(3.1)	(2.2)	512,138
Nashville-Davidson-Murfreesboro, TN	82	100	(5.6)	(7.0)	1,455,097
New Haven-Milford, CT	22	25	(2.6)	(3.0)	845,244
New Orleans-Metairie-Kenner, LA	80	115	(7.8)	(8.8)	1,024,678
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,574	1,569	(8.4)	(8.3)	18,818,536
Oklahoma City, OK	46	44	(3.9)	(3.8)	1,172,339
Omaha-Council Bluffs, NE-IA	13	19	(1.6)	(2.3)	822,549
Orlando-Kissimmee, FL	141	121	(7.1)	(6.3)	1,984,855
Oxnard-Thousand Oaks-Ventura, CA	49	55	(6.1)	(6.9)	799,720
Palm Bay-Melbourne-Titusville, FL	8	14	(1.5)	(2.6)	534,359
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	285	244	(4.9)	(4.2)	5,826,742
Phoenix-Mesa-Scottsdale, AZ	205	194	(5.1)	(5.0)	4,039,182
Pittsburgh, PA	31	37	(1.3)	(1.6)	2,370,776
Portland-South Portland-Biddeford, ME	10	7	(1.9)	(1.4)	513,667
Portland-Vancouver-Beaverton, OR-WA	51	74	(2.4)	(3.5)	2,137,565
Poughkeepsie-Newburgh-Middletown, NY	13	9	(1.9)	(1.3)	671,538
Providence-New Bedford-Fall River, RI-MA	38	61	(2.4)	(3.8)	1,612,989
Raleigh-Cary, NC	56	40	(5.6)	(4.2)	994,551
Richmond, VA	42	51	(3.5)	(4.3)	1,194,008
Riverside-San Bernardino-Ontario, CA	132	122	(3.3)	(3.1)	4,026,135
Rochester, NY	25	22	(2.4)	(2.1)	1,035,435
Sacramento--Arden Arcade--Roseville, CA	110	160	(5.3)	(7.8)	2,067,117
St. Louis, MO-IL	52	53	(1.9)	(1.9)	2,796,368
Salt Lake City, UT	26	22	(2.4)	(2.1)	1,067,722
San Antonio, TX	108	86	(5.6)	(4.6)	1,942,217
San Diego-Carlsbad-San Marcos, CA	315	305	(10.7)	(10.4)	2,941,454
San Francisco-Oakland-Fremont, CA	400	427	(9.6)	(10.3)	4,180,027
San Jose-Sunnyvale-Santa Clara, CA	229	199	(12.8)	(11.3)	1,787,123
Sarasota-Bradenton-Venice, FL	33	29	(4.8)	(4.3)	682,833
Scranton--Wilkes-Barre, PA	8	7	(1.5)	(1.3)	550,841
Seattle-Tacoma-Bellevue, WA	192	176	(5.9)	(5.5)	3,263,497
Springfield, MA	17	22	(2.5)	(3.2)	686,174
Stockton, CA	78	63	(11.6)	(9.5)	673,170
Syracuse, NY	14	18	(2.2)	(2.8)	650,051
Tampa-St. Petersburg-Clearwater, FL	123	125	(4.6)	(4.7)	2,697,731
Toledo, OH	12	13	(1.8)	(2.0)	653,695
Tucson, AZ	35	33	(3.7)	(3.6)	946,362
Tulsa, OK	27	31	(3.0)	(3.5)	897,752
Virginia Beach-Norfolk-Newport News, VA-NC	51	67	(3.1)	(4.1)	1,649,457
Washington-Arlington-Alexandria, DC-VA-MD-WV	421	388	(8.0)	(7.4)	5,290,400
Wichita, KS	30	22	(5.1)	(3.7)	592,126
Worcester, MA	32	26	(4.1)	(3.3)	784,992
Youngstown-Warren-Boardman, OH-PA	6	7	(1.0)	(1.2)	586,939
<b>Total - 97 Areas</b>	<b>10,733</b>	<b>10,910</b>	<b>(5.5)</b>	<b>(5.7)</b>	<b>194,048,471</b>
San Juan-Caguas-Guaynabo, PR	88	95	(3.4)	(3.7)	2,590,824

**Note:** In 2006, there were 97 metropolitan statistical areas with a population of 500,000 or more.

2006 and 2005 population case counts and rates updated using U.S. Census Metropolitan Statistical Areas and Components, December 2006, with Codes ([http://www.census.gov/population/www/estimates/metro\\_general/2006/List4.txt](http://www.census.gov/population/www/estimates/metro_general/2006/List4.txt)).

See Technical Notes (page 9) for definition of MSA.

**Table 47. Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Cases in Persons with Both Pul- monary and Extrapulm. Disease		
		No.	(%)	No.	(%)	Total <sup>3</sup>		Miliary No.
						No.	(%)	
Akron, OH	5	5	(100.0)	0	(0.0)	0	(0.0)	0
Albany-Schenectady-Troy, NY	17	10	(58.8)	7	(41.2)	0	(0.0)	0
Albuquerque, NM	12	7	(58.3)	3	(25.0)	2	(16.7)	1
Allentown-Bethlehem-Easton, PA-NJ	22	17	(77.3)	4	(18.2)	1	(4.5)	0
Atlanta-Sandy Springs-Marietta, GA	280	183	(65.4)	70	(25.0)	27	(9.6)	7
Augusta-Richmond County, GA-SC	35	28	(80.0)	4	(11.4)	3	(8.6)	2
Austin-Round Rock, TX	52	37	(71.2)	11	(21.2)	4	(7.7)	0
Bakersfield, CA	40	26	(65.0)	8	(20.0)	6	(15.0)	2
Baltimore-Towson, MD	83	55	(66.3)	23	(27.7)	5	(6.0)	1
Baton Rouge, LA	17	10	(58.8)	5	(29.4)	2	(11.8)	0
Birmingham-Hoover, AL	44	31	(70.5)	10	(22.7)	3	(6.8)	0
Boise City-Nampa, ID	5	4	(80.0)	1	(20.0)	0	(0.0)	0
Boston-Cambridge-Quincy, MA-NH	188	106	(56.4)	47	(25.0)	35	(18.6)	7
Bridgeport-Stamford-Norwalk, CT	33	22	(66.7)	9	(27.3)	2	(6.1)	1
Buffalo-Niagara Falls, NY	15	11	(73.3)	2	(13.3)	2	(13.3)	0
Cape Coral-Fort Myers, FL	19	16	(84.2)	3	(15.8)	0	(0.0)	0
Charleston-North Charleston, SC	34	18	(52.9)	12	(35.3)	4	(11.8)	3
Charlotte-Gastonia-Concord, NC-SC	81	56	(69.1)	19	(23.5)	6	(7.4)	3
Chicago-Naperville-Joliet, IL	522	343	(65.7)	144	(27.6)	34	(6.5)	10
Cincinnati-Middletown, OH-KY-IN	36	32	(88.9)	3	(8.3)	1	(2.8)	0
Cleveland-Elyria-Mentor, OH	47	31	(66.0)	14	(29.8)	2	(4.3)	1
Colorado Springs, CO	10	8	(80.0)	1	(10.0)	1	(10.0)	0
Columbia, SC	20	15	(75.0)	3	(15.0)	2	(10.0)	1
Columbus, OH	90	61	(67.8)	22	(24.4)	7	(7.8)	0
Dallas-Fort Worth-Arlington, TX	422	297	(70.4)	77	(18.2)	48	(11.4)	17
Dayton, OH	15	10	(66.7)	5	(33.3)	0	(0.0)	0
Denver-Aurora, CO	85	48	(56.5)	24	(28.2)	13	(15.3)	1
Des Moines-West Des Moines, IA	15	9	(60.0)	6	(40.0)	0	(0.0)	0
Detroit-Warren-Livonia, MI	131	89	(67.9)	38	(29.0)	4	(3.1)	0
El Paso, TX	72	50	(69.4)	16	(22.2)	6	(8.3)	2
Fresno, CA	62	55	(88.7)	4	(6.5)	3	(4.8)	2
Grand Rapids-Wyoming, MI	22	9	(40.9)	11	(50.0)	2	(9.1)	0
Greensboro-High Point, NC	42	27	(64.3)	9	(21.4)	6	(14.3)	1
Greenville, SC	11	8	(72.7)	2	(18.2)	1	(9.1)	0
Harrisburg-Carlisle, PA	5	3	(60.0)	1	(20.0)	1	(20.0)	0
Hartford-West Hartford-East Hartford, CT	20	13	(65.0)	7	(35.0)	0	(0.0)	0
Honolulu, HI	95	72	(75.8)	13	(13.7)	10	(10.5)	2
Houston-Sugar Land-Baytown, TX	473	358	(75.7)	83	(17.5)	32	(6.8)	13
Indianapolis-Carmel, IN	51	38	(74.5)	9	(17.6)	4	(7.8)	3
Jackson, MS	31	28	(90.3)	1	(3.2)	2	(6.5)	1
Jacksonville, FL	96	83	(86.5)	10	(10.4)	3	(3.1)	2
Kansas City, MO-KS	50	39	(78.0)	7	(14.0)	4	(8.0)	2
Knoxville, TN	15	12	(80.0)	3	(20.0)	0	(0.0)	0
Lakeland, FL	31	30	(96.8)	0	(0.0)	1	(3.2)	0
Las Vegas-Paradise, NV	89	66	(74.2)	17	(19.1)	6	(6.7)	0
Little Rock-North Little Rock, AR	11	9	(81.8)	1	(9.1)	1	(9.1)	0
Los Angeles-Long Beach-Santa Ana, CA	1,157	802	(69.3)	253	(21.9)	102	(8.8)	15
Louisville-Jefferson County, KY-IN	28	21	(75.0)	4	(14.3)	3	(10.7)	1
Madison, WI	11	8	(72.7)	3	(27.3)	0	(0.0)	0
McAllen-Edinburg-Mission, TX	68	57	(83.8)	9	(13.2)	2	(2.9)	2
Memphis, TN-MS-AR	121	65	(53.7)	31	(25.6)	25	(20.7)	1
Miami-Fort Lauderdale-Miami Beach, FL	369	291	(78.9)	69	(18.7)	9	(2.4)	1
Milwaukee-Waukesha-West Allis, WI	33	20	(60.6)	9	(27.3)	4	(12.1)	4
Minneapolis-St. Paul-Bloomington, MN-WI	169	88	(52.1)	57	(33.7)	24	(14.2)	0

**Table 47. (Cont'd) Tuberculosis Cases by Pulmonary and Extrapulmonary Disease: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	Pulmonary <sup>1</sup>		Extrapulmonary <sup>2</sup>		Cases in Persons with Both Pulmonary and Extrapulm. Disease		
		No.	(%)	No.	(%)	Total <sup>3</sup>		Miliary
						No.	(%)	No.
Modesto, CA	16	12	(75.0)	4	(25.0)	0	(0.0)	0
Nashville-Davidson-Murfreesboro, TN	82	67	(81.7)	12	(14.6)	3	(3.7)	0
New Haven-Milford, CT	22	13	(59.1)	6	(27.3)	3	(13.6)	0
New Orleans-Metairie-Kenner, LA	80	64	(80.0)	13	(16.3)	3	(3.8)	2
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,574	1,056	(67.1)	348	(22.1)	170	(10.8)	10
Oklahoma City, OK	46	33	(71.7)	12	(26.1)	1	(2.2)	0
Omaha-Council Bluffs, NE-IA	13	7	(53.8)	6	(46.2)	0	(0.0)	0
Orlando-Kissimmee, FL	141	107	(75.9)	15	(10.6)	18	(12.8)	1
Oxnard-Thousand Oaks-Ventura, CA	49	33	(67.3)	14	(28.6)	2	(4.1)	0
Palm Bay-Melbourne-Titusville, FL	8	4	(50.0)	3	(37.5)	1	(12.5)	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	285	187	(65.6)	68	(23.9)	29	(10.2)	6
Phoenix-Mesa-Scottsdale, AZ	205	158	(77.1)	27	(13.2)	20	(9.8)	7
Pittsburgh, PA	31	19	(61.3)	9	(29.0)	3	(9.7)	0
Portland-South Portland-Biddeford, ME	10	5	(50.0)	5	(50.0)	0	(0.0)	0
Portland-Vancouver-Beaverton, OR-WA	51	34	(66.7)	17	(33.3)	0	(0.0)	0
Poughkeepsie-Newburgh-Middletown, NY	13	10	(76.9)	3	(23.1)	0	(0.0)	0
Providence-New Bedford-Fall River, RI-MA	38	20	(52.6)	16	(42.1)	2	(5.3)	0
Raleigh-Cary, NC	56	37	(66.1)	16	(28.6)	3	(5.4)	1
Richmond, VA	42	29	(69.0)	8	(19.0)	5	(11.9)	3
Riverside-San Bernardino-Ontario, CA	132	102	(77.3)	23	(17.4)	7	(5.3)	1
Rochester, NY	25	14	(56.0)	6	(24.0)	5	(20.0)	0
Sacramento-Arden Arcade-Roseville, CA	110	82	(74.5)	17	(15.5)	11	(10.0)	2
St. Louis, MO-IL	52	33	(63.5)	12	(23.1)	7	(13.5)	0
Salt Lake City, UT	26	14	(53.8)	9	(34.6)	3	(11.5)	1
San Antonio, TX	108	70	(64.8)	25	(23.1)	13	(12.0)	6
San Diego-Carlsbad-San Marcos, CA	315	185	(58.7)	65	(20.6)	65	(20.6)	18
San Francisco-Oakland-Fremont, CA	400	255	(63.8)	109	(27.3)	36	(9.0)	3
San Jose-Sunnyvale-Santa Clara, CA	229	154	(67.2)	61	(26.6)	14	(6.1)	2
Sarasota-Bradenton-Venice, FL	33	28	(84.8)	2	(6.1)	3	(9.1)	0
Scranton-Wilkes-Barre, PA	8	4	(50.0)	4	(50.0)	0	(0.0)	0
Seattle-Tacoma-Bellevue, WA	192	112	(58.3)	54	(28.1)	26	(13.5)	4
Springfield, MA	17	10	(58.8)	2	(11.8)	5	(29.4)	0
Stockton, CA	78	59	(75.6)	15	(19.2)	4	(5.1)	1
Syracuse, NY	14	7	(50.0)	6	(42.9)	1	(7.1)	1
Tampa-St. Petersburg-Clearwater, FL	123	99	(80.5)	19	(15.4)	5	(4.1)	0
Toledo, OH	12	7	(58.3)	5	(41.7)	0	(0.0)	0
Tucson, AZ	35	28	(80.0)	7	(20.0)	0	(0.0)	0
Tulsa, OK	27	18	(66.7)	7	(25.9)	2	(7.4)	0
Virginia Beach-Norfolk-Newport News, VA-NC	51	31	(60.8)	12	(23.5)	8	(15.7)	3
Washington-Arlington-Alexandria, DC-VA-MD-WV	421	294	(69.8)	97	(23.0)	30	(7.1)	3
Wichita, KS	30	24	(80.0)	3	(10.0)	3	(10.0)	0
Worcester, MA	32	25	(78.1)	4	(12.5)	3	(9.4)	1
Youngstown-Warren-Boardman, OH-PA	6	4	(66.7)	2	(33.3)	0	(0.0)	0
<b>Total - 97 Areas</b>	<b>10,745</b>	<b>7,391</b>	<b>(68.8)</b>	<b>2,372</b>	<b>(22.1)</b>	<b>979</b>	<b>(9.1)</b>	<b>185</b>
San Juan-Caguas-Guaynabo, PR	88	80	(90.9)	6	(6.8)	2	(2.3)	0

<sup>1</sup>Includes cases in persons with pulmonary listed as major site of disease and no additional site of disease.

<sup>2</sup>Includes cases in persons with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as major site of disease.

<sup>3</sup>Includes military cases.

**Note:** 3 (<0.1%) case had missing and/or unknown site of disease.  
See Technical Notes (page 9) for definition of MSA.

**Table 48. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	$\geq 65$	Unknown or Missing
Akron, OH	5	0	1	0	2	1	1	0
Albany-Schenectady-Troy, NY	17	0	1	1	7	3	5	0
Albuquerque, NM	12	0	0	0	1	7	4	0
Allentown-Bethlehem-Easton, PA-NJ	22	0	0	0	5	9	8	0
Atlanta-Sandy Springs-Marietta, GA	280	16	5	33	119	83	23	1
Augusta-Richmond County, GA-SC	35	0	0	6	13	12	4	0
Austin-Round Rock, TX	52	5	0	2	19	23	3	0
Bakersfield, CA	40	1	1	9	9	9	11	0
Baltimore-Towson, MD	83	2	1	7	31	24	18	0
Baton Rouge, LA	17	1	0	2	11	2	1	0
Birmingham-Hoover, AL	44	0	0	3	13	16	12	0
Boise City-Nampa, ID	5	0	1	0	3	1	0	0
Boston-Cambridge-Quincy, MA-NH	188	7	1	16	80	48	36	0
Bridgeport-Stamford-Norwalk, CT	33	0	0	5	14	9	5	0
Buffalo-Niagara Falls, NY	15	0	0	2	3	3	7	0
Cape Coral-Fort Myers, FL	19	2	0	6	6	5	0	0
Charleston-North Charleston, SC	34	2	0	5	9	11	7	0
Charlotte-Gastonia-Concord, NC-SC	81	1	1	12	27	30	10	0
Chicago-Naperville-Joliet, IL	522	28	15	46	158	172	103	0
Cincinnati-Middleton, OH-KY-IN	36	0	1	4	11	11	9	0
Cleveland-Elyria-Mentor, OH	47	2	2	7	12	6	18	0
Colorado Springs, CO	10	0	0	0	3	4	3	0
Columbia, SC	20	0	0	2	6	5	7	0
Columbus, OH	90	4	5	18	41	13	9	0
Dallas-Fort Worth-Arlington, TX	422	15	8	54	168	128	49	0
Dayton, OH	15	0	0	5	1	1	8	0
Denver-Aurora, CO	85	3	2	15	24	21	20	0
Des Moines-West Des Moines, IA	15	0	0	2	6	4	3	0
Detroit-Warren-Livonia, MI	131	3	0	11	35	46	36	0
El Paso, TX	72	6	2	5	12	17	30	0
Fresno, CA	62	3	1	9	21	14	14	0
Grand Rapids-Wyoming, MI	22	1	0	3	9	4	5	0
Greensboro-High Point, NC	42	1	1	11	17	7	5	0
Greenville, SC	11	0	0	4	3	2	2	0
Harrisburg-Carlisle, PA	5	1	0	1	2	0	1	0
Hartford-West Hartford-East Hartford, CT	20	0	0	3	9	5	3	0
Honolulu, HI	95	0	2	14	26	30	23	0
Houston-Sugar Land-Baytown, TX	473	10	17	54	179	155	58	0
Indianapolis-Carmel, IN	51	4	4	5	23	8	7	0
Jackson, MS	31	1	3	1	7	13	6	0
Jacksonville, FL	96	9	1	8	28	39	11	0
Kansas City, MO-KS	50	6	0	5	15	17	7	0
Knoxville, TN	15	0	0	1	1	4	9	0
Lakeland, FL	31	1	0	2	8	15	5	0
Las Vegas-Paradise, NV	89	2	2	8	27	42	8	0
Little Rock-North Little Rock, AR	11	0	0	1	1	6	3	0
Los Angeles-Long Beach-Santa Ana, CA	1,157	39	13	122	363	363	257	0
Louisville-Jefferson County, KY-IN	28	0	0	4	12	9	3	0
Madison, WI	11	3	0	1	3	2	2	0
McAllen-Edinburg-Mission, TX	68	4	5	3	18	23	15	0
Memphis, TN-MS-AR	121	10	5	10	48	36	12	0
Miami-Fort Lauderdale-Miami Beach, FL	369	12	3	34	142	129	49	0
Milwaukee-Waukesha-West Allis, WI	33	2	1	4	8	8	10	0
Minneapolis-St. Paul-Bloomington, MN-WI	169	7	13	42	61	28	18	0

**Table 48. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with ≥500,000 Population, 2006**

Metropolitan Statistical Area	Total Cases	Under 5	5–14	15–24	25–44	45–64	≥65	Unknown or Missing
Modesto, CA	16	0	0	1	4	5	6	0
Nashville-Davidson-Murfreesboro, TN	82	2	1	12	27	21	19	0
New Haven-Milford, CT	22	0	1	1	9	5	6	0
New Orleans-Metairie-Kenner, LA	80	4	4	6	32	27	7	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,574	33	26	171	650	425	269	0
Oklahoma City, OK	46	2	1	3	13	18	9	0
Omaha-Council Bluffs, NE-IA	13	0	0	1	8	2	2	0
Orlando-Kissimmee, FL	141	6	4	18	52	47	14	0
Oxnard-Thousand Oaks-Ventura, CA	49	1	1	8	13	8	18	0
Palm Bay-Melbourne-Titusville, FL	8	0	0	1	2	2	3	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	285	16	17	27	82	83	60	0
Phoenix-Mesa-Scottsdale, AZ	205	13	9	22	83	48	30	0
Pittsburgh, PA	31	0	1	1	9	11	9	0
Portland-South Portland-Biddeford, ME	10	0	0	2	4	2	2	0
Portland-Vancouver-Beaverton, OR-WA	51	0	1	8	21	12	9	0
Poughkeepsie-Newburgh-Middletown, NY	13	0	0	0	4	6	3	0
Providence-New Bedford-Fall River, RI-MA	38	0	3	4	17	12	2	0
Raleigh-Cary, NC	56	1	2	8	28	11	6	0
Richmond, VA	42	1	0	3	12	14	12	0
Riverside-San Bernardino-Ontario, CA	132	4	1	12	47	32	36	0
Rochester, NY	25	2	2	1	3	8	9	0
Sacramento-Arden Arcade-Roseville, CA	110	0	1	17	31	39	22	0
St. Louis, MO-IL	52	3	2	4	19	13	11	0
Salt Lake City, UT	26	5	1	2	9	7	2	0
San Antonio, TX	108	8	1	9	30	37	23	0
San Diego-Carlsbad-San Marcos, CA	315	19	13	43	90	82	68	0
San Francisco-Oakland-Fremont, CA	400	2	3	44	126	109	116	0
San Jose-Sunnyvale-Santa Clara, CA	229	6	4	20	86	56	57	0
Sarasota-Bradenton-Venice, FL	33	0	2	3	10	18	0	0
Scranton-Wilkes-Barre, PA	8	0	0	1	2	1	4	0
Seattle-Tacoma-Bellevue, WA	192	5	3	22	76	46	40	0
Springfield, MA	17	0	0	2	8	5	2	0
Stockton, CA	78	3	0	6	20	24	25	0
Syracuse, NY	14	0	1	2	4	5	2	0
Tampa-St. Petersburg-Clearwater, FL	123	2	2	5	50	42	22	0
Toledo, OH	12	0	0	1	2	3	6	0
Tucson, AZ	35	1	1	3	9	14	7	0
Tulsa, OK	27	2	2	1	7	12	3	0
Virginia Beach-Norfolk-Newport News, VA-NC	51	4	1	9	11	12	14	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	421	9	13	57	176	110	56	0
Wichita, KS	30	0	0	4	13	10	3	0
Worcester, MA	32	0	0	7	18	3	4	0
Youngstown-Warren-Boardman, OH-PA	6	0	0	1	0	2	3	0
<b>Total - 97 Areas</b>	<b>10,745</b>	<b>368</b>	<b>242</b>	<b>1,201</b>	<b>3,797</b>	<b>3,132</b>	<b>2,004</b>	<b>1</b>
San Juan-Caguas-Guaynabo, PR	88	3	3	6	26	31	19	0

**Note:** See Technical Notes (page 9) for definition of MSA.



**Table 49. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	Hispanic or Latino <sup>1</sup>	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race <sup>2</sup>	Unknown or Missing
Akron, OH	5	0	0	0	0	0	5	0	0
Albany-Schenectady-Troy, NY	17	1	0	8	5	0	3	0	0
Albuquerque, NM	12	7	1	2	0	0	2	0	0
Allentown-Bethlehem-Easton, PA-NJ	22	7	0	7	1	0	7	0	0
Atlanta-Sandy Springs-Marietta, GA	280	65	0	52	131	0	32	0	0
Augusta-Richmond County, GA-SC	35	4	0	4	20	0	7	0	0
Austin-Round Rock, TX	52	27	0	5	8	0	12	0	0
Bakersfield, CA	40	27	0	8	3	0	2	0	0
Baltimore-Towson, MD	83	14	0	15	42	0	12	0	0
Baton Rouge, LA	17	3	0	3	9	0	2	0	0
Birmingham-Hoover, AL	44	8	0	3	22	0	11	0	0
Boise City-Nampa, ID	5	2	0	1	0	1	1	0	0
Boston-Cambridge-Quincy, MA-NH	188	31	0	60	60	0	36	1	0
Bridgeport-Stamford-Norwalk, CT	33	13	0	6	6	0	8	0	0
Buffalo-Niagara Falls, NY	15	0	0	4	4	0	7	0	0
Cape Coral-Fort Myers, FL	19	9	0	0	5	0	5	0	0
Charleston-North Charleston, SC	34	4	0	5	22	0	3	0	0
Charlotte-Gastonia-Concord, NC-SC	81	12	0	11	37	0	20	1	0
Chicago-Naperville-Joliet, IL	522	140	1	141	168	0	72	0	0
Cincinnati-Middletown, OH-KY-IN	36	4	0	3	13	0	15	1	0
Cleveland-Elyria-Mentor, OH	47	2	0	9	21	0	15	0	0
Colorado Springs, CO	10	5	0	2	2	0	0	1	0
Columbia, SC	20	6	1	0	7	0	6	0	0
Columbus, OH	90	6	0	6	64	0	14	0	0
Dallas-Fort Worth-Arlington, TX	422	137	2	69	145	0	68	1	0
Dayton, OH	15	0	0	2	10	0	3	0	0
Denver-Aurora, CO	85	37	0	19	19	0	10	0	0
Des Moines-West Des Moines, IA	15	2	0	6	5	0	2	0	0
Detroit-Warren-Livonia, MI	131	13	0	32	60	0	26	0	0
El Paso, TX	72	62	1	1	1	0	7	0	0
Fresno, CA	62	30	0	18	2	1	10	1	0
Grand Rapids-Wyoming, MI	22	6	1	4	6	0	5	0	0
Greensboro-High Point, NC	42	5	0	14	20	0	3	0	0
Greenville, SC	11	4	0	0	4	1	2	0	0
Harrisburg-Carlisle, PA	5	1	0	1	1	0	2	0	0
Hartford-West Hartford-East Hartford, CT	20	1	0	8	5	0	6	0	0
Honolulu, HI	95	0	0	79	0	11	5	0	0
Houston-Sugar Land-Baytown, TX	473	185	2	87	128	0	69	2	0
Indianapolis-Carmel, IN	51	18	0	8	13	0	12	0	0
Jackson, MS	31	3	0	3	17	0	8	0	0
Jacksonville, FL	96	6	0	12	57	0	21	0	0
Kansas City, MO-KS	50	22	0	4	15	0	9	0	0
Knoxville, TN	15	0	0	0	1	0	14	0	0
Lakeland, FL	31	4	0	0	14	0	13	0	0
Las Vegas-Paradise, NV	89	36	0	22	17	0	14	0	0
Little Rock-North Little Rock, AR	11	1	0	0	5	0	5	0	0
Los Angeles-Long Beach-Santa Ana, CA	1,157	474	1	489	90	2	99	2	0
Louisville-Jefferson County, KY-IN	28	3	0	2	10	0	13	0	0
Madison, WI	11	5	0	3	0	0	3	0	0
McAllen-Edinburg-Mission, TX	68	68	0	0	0	0	0	0	0
Memphis, TN-MS-AR	121	18	0	8	87	2	6	0	0
Miami-Fort Lauderdale-Miami Beach, FL	369	143	0	22	167	0	37	0	0
Milwaukee-Waukesha-West Allis, WI	33	8	0	8	10	0	7	0	0
Minneapolis-St. Paul-Bloomington, MN-WI	169	16	3	41	94	0	14	1	0

**Table 49. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	Hispanic or Latino <sup>1</sup>	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Multiple Race <sup>2</sup>	Unknown or Missing
Modesto, CA	16	4	0	10	0	1	1	0	0
Nashville-Davidson-Murfreesboro, TN	82	11	0	11	36	0	23	1	0
New Haven-Milford, CT	22	3	0	5	7	0	7	0	0
New Orleans-Metairie-Kenner, LA	80	7	0	5	40	0	28	0	0
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,574	507	0	469	411	3	181	2	1
Oklahoma City, OK	46	6	5	12	5	0	18	0	0
Omaha-Council Bluffs, NE-IA	13	5	0	2	3	0	1	2	0
Orlando-Kissimmee, FL	141	28	0	16	68	1	28	0	0
Oxnard-Thousand Oaks-Ventura, CA	49	33	0	11	1	0	4	0	0
Palm Bay-Melbourne-Titusville, FL	8	2	0	1	1	0	4	0	0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	285	39	0	69	135	2	40	0	0
Phoenix-Mesa-Scottsdale, AZ	205	124	3	23	19	0	36	0	0
Pittsburgh, PA	31	0	0	7	9	0	15	0	0
Portland-South Portland-Biddeford, ME	10	0	0	1	6	0	3	0	0
Portland-Vancouver-Beaverton, OR-WA	51	6	1	18	10	2	14	0	0
Poughkeepsie-Newburgh-Middletown, NY	13	3	0	3	4	0	3	0	0
Providence-New Bedford-Fall River, RI-MA	38	14	0	7	5	0	12	0	0
Raleigh-Cary, NC	56	9	0	18	23	0	6	0	0
Richmond, VA	42	3	0	6	24	0	9	0	0
Riverside-San Bernardino-Ontario, CA	132	76	2	33	1	0	17	2	1
Rochester, NY	25	0	0	1	14	0	10	0	0
Sacramento-Arden Arcade-Roseville, CA	110	25	0	52	13	2	18	0	0
St. Louis, MO-IL	52	1	0	10	26	0	15	0	0
Salt Lake City, UT	26	9	0	4	6	3	4	0	0
San Antonio, TX	108	68	0	11	12	0	16	1	0
San Diego-Carlsbad-San Marcos, CA	315	168	2	98	21	0	26	0	0
San Francisco-Oakland-Fremont, CA	400	70	1	237	54	4	34	0	0
San Jose-Sunnyvale-Santa Clara, CA	229	30	0	167	12	1	19	0	0
Sarasota-Bradenton-Venice, FL	33	13	0	1	6	0	11	2	0
Scranton-Wilkes-Barre, PA	8	2	0	0	1	0	5	0	0
Seattle-Tacoma-Bellevue, WA	192	24	4	98	32	3	31	0	0
Springfield, MA	17	4	0	8	2	0	3	0	0
Stockton, CA	78	26	0	39	7	0	5	1	0
Syracuse, NY	14	1	0	3	8	0	2	0	0
Tampa-St. Petersburg-Clearwater, FL	123	36	0	16	23	0	47	1	0
Toledo, OH	12	0	0	0	7	0	5	0	0
Tucson, AZ	35	17	1	4	4	0	9	0	0
Tulsa, OK	27	8	3	2	9	0	5	0	0
Virginia Beach-Norfolk-Newport News, VA-NC	51	8	0	11	31	0	1	0	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	421	96	0	128	175	0	21	1	0
Wichita, KS	30	3	0	11	5	0	10	1	0
Worcester, MA	32	10	0	12	6	1	3	0	0
Youngstown-Warren-Boardman, OH-PA	6	0	0	0	3	0	3	0	0
<b>Total - 97 Areas</b>	<b>10,745</b>	<b>3,204</b>	<b>35</b>	<b>2,957</b>	<b>2,938</b>	<b>41</b>	<b>1,543</b>	<b>25</b>	<b>2</b>
San Juan-Caguas-Guaynabo, PR	88	88	0	0	0	0	0	0	0

<sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes (page 9) for definition of MSA and Hispanic ethnicity and non-Hispanic race.



**Table 50. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2006**

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Akron, OH	5	5	(100.0)	0	(0.0)	0	(0.0)
Albany-Schenectady-Troy, NY	17	6	(35.3)	11	(64.7)	0	(0.0)
Albuquerque, NM	12	4	(33.3)	8	(66.7)	0	(0.0)
Allentown-Bethlehem-Easton, PA-NJ	22	6	(27.3)	16	(72.7)	0	(0.0)
Atlanta-Sandy Springs-Marietta, GA	280	133	(47.5)	147	(52.5)	0	(0.0)
Augusta-Richmond County, GA-SC	35	29	(82.9)	6	(17.1)	0	(0.0)
Austin-Round Rock, TX	52	35	(67.3)	17	(32.7)	0	(0.0)
Bakersfield, CA	40	11	(27.5)	29	(72.5)	0	(0.0)
Baltimore-Towson, MD	83	37	(44.6)	46	(55.4)	0	(0.0)
Baton Rouge, LA	17	11	(64.7)	6	(35.3)	0	(0.0)
Birmingham-Hoover, AL	44	32	(72.7)	12	(27.3)	0	(0.0)
Boise City-Nampa, ID	5	1	(20.0)	4	(80.0)	0	(0.0)
Boston-Cambridge-Quincy, MA-NH	188	49	(26.1)	138	(73.4)	1	(0.5)
Bridgeport-Stamford-Norwalk, CT	33	8	(24.2)	25	(75.8)	0	(0.0)
Buffalo-Niagara Falls, NY	15	6	(40.0)	9	(60.0)	0	(0.0)
Cape Coral-Fort Myers, FL	19	6	(31.6)	13	(68.4)	0	(0.0)
Charleston-North Charleston, SC	34	25	(73.5)	9	(26.5)	0	(0.0)
Charlotte-Gastonia-Concord, NC-SC	81	51	(63.0)	29	(35.8)	1	(1.2)
Chicago-Naperville-Joliet, IL	522	236	(45.2)	273	(52.3)	13	(2.5)
Cincinnati-Middletown, OH-KY-IN	36	24	(66.7)	12	(33.3)	0	(0.0)
Cleveland-Elyria-Mentor, OH	47	33	(70.2)	14	(29.8)	0	(0.0)
Colorado Springs, CO	10	3	(30.0)	7	(70.0)	0	(0.0)
Columbia, SC	20	13	(65.0)	7	(35.0)	0	(0.0)
Columbus, OH	90	33	(36.7)	57	(63.3)	0	(0.0)
Dallas-Fort Worth-Arlington, TX	422	213	(50.5)	209	(49.5)	0	(0.0)
Dayton, OH	15	10	(66.7)	5	(33.3)	0	(0.0)
Denver-Aurora, CO	85	29	(34.1)	56	(65.9)	0	(0.0)
Des Moines-West Des Moines, IA	15	2	(13.3)	13	(86.7)	0	(0.0)
Detroit-Warren-Livonia, MI	131	80	(61.1)	51	(38.9)	0	(0.0)
El Paso, TX	72	29	(40.3)	43	(59.7)	0	(0.0)
Fresno, CA	62	19	(30.6)	41	(66.1)	2	(3.2)
Grand Rapids-Wyoming, MI	22	8	(36.4)	14	(63.6)	0	(0.0)
Greensboro-High Point, NC	42	20	(47.6)	22	(52.4)	0	(0.0)
Greenville, SC	11	7	(63.6)	4	(36.4)	0	(0.0)
Harrisburg-Carlisle, PA	5	3	(60.0)	2	(40.0)	0	(0.0)
Hartford-West Hartford-East Hartford, CT	20	7	(35.0)	13	(65.0)	0	(0.0)
Honolulu, HI	95	18	(18.9)	77	(81.1)	0	(0.0)
Houston-Sugar Land-Baytown, TX	473	247	(52.2)	226	(47.8)	0	(0.0)
Indianapolis-Carmel, IN	51	21	(41.2)	30	(58.8)	0	(0.0)
Jackson, MS	31	25	(80.6)	6	(19.4)	0	(0.0)
Jacksonville, FL	96	76	(79.2)	20	(20.8)	0	(0.0)
Kansas City, MO-KS	50	21	(42.0)	29	(58.0)	0	(0.0)
Knoxville, TN	15	14	(93.3)	1	(6.7)	0	(0.0)
Lakeland, FL	31	28	(90.3)	3	(9.7)	0	(0.0)
Las Vegas-Paradise, NV	89	26	(29.2)	63	(70.8)	0	(0.0)
Little Rock-North Little Rock, AR	11	10	(90.9)	1	(9.1)	0	(0.0)
Los Angeles-Long Beach-Santa Ana, CA	1,157	245	(21.2)	906	(78.3)	6	(0.5)
Louisville-Jefferson County, KY-IN	28	21	(75.0)	7	(25.0)	0	(0.0)
Madison, WI	11	5	(45.5)	5	(45.5)	1	(9.1)
McAllen-Edinburg-Mission, TX	68	24	(35.3)	44	(64.7)	0	(0.0)
Memphis, TN-MS-AR	121	94	(77.7)	27	(22.3)	0	(0.0)
Miami-Fort Lauderdale-Miami Beach, FL	369	132	(35.8)	237	(64.2)	0	(0.0)
Milwaukee-Waukesha-West Allis, WI	33	17	(51.5)	16	(48.5)	0	(0.0)
Minneapolis-St. Paul-Bloomington, MN-WI	169	25	(14.8)	144	(85.2)	0	(0.0)

**Table 50. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with ≥500,000 Population, 2006**

Metropolitan Statistical Area	Total Cases	U.S.-born Persons		Foreign-born Persons <sup>1</sup>		Unknown	
		No.	(%)	No.	(%)	No.	(%)
Modesto, CA	16	2	(12.5)	14	(87.5)	0	(0.0)
Nashville-Davidson-Murfreesboro, TN	82	50	(61.0)	32	(39.0)	0	(0.0)
New Haven-Milford, CT	22	12	(54.5)	10	(45.5)	0	(0.0)
New Orleans-Metairie-Kenner, LA	80	69	(86.3)	11	(13.8)	0	(0.0)
New York-Northern New Jersey-Long Island, NY-NJ-PA	1,574	424	(26.9)	1,145	(72.7)	5	(0.3)
Oklahoma City, OK	46	29	(63.0)	17	(37.0)	0	(0.0)
Omaha-Council Bluffs, NE-IA	13	1	(7.7)	12	(92.3)	0	(0.0)
Orlando-Kissimmee, FL	141	82	(58.2)	59	(41.8)	0	(0.0)
Oxnard-Thousand Oaks-Ventura, CA	49	9	(18.4)	40	(81.6)	0	(0.0)
Palm Bay-Melbourne-Titusville, FL	8	5	(62.5)	3	(37.5)	0	(0.0)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	285	141	(49.5)	144	(50.5)	0	(0.0)
Phoenix-Mesa-Scottsdale, AZ	205	74	(36.1)	123	(60.0)	8	(3.9)
Pittsburgh, PA	31	19	(61.3)	12	(38.7)	0	(0.0)
Portland-South Portland-Biddeford, ME	10	4	(40.0)	6	(60.0)	0	(0.0)
Portland-Vancouver-Beaverton, OR-WA	51	15	(29.4)	36	(70.6)	0	(0.0)
Poughkeepsie-Newburgh-Middletown, NY	13	7	(53.8)	6	(46.2)	0	(0.0)
Providence-New Bedford-Fall River, RI-MA	38	5	(13.2)	33	(86.8)	0	(0.0)
Raleigh-Cary, NC	56	24	(42.9)	32	(57.1)	0	(0.0)
Richmond, VA	42	31	(73.8)	11	(26.2)	0	(0.0)
Riverside-San Bernardino-Ontario, CA	132	36	(27.3)	95	(72.0)	1	(0.8)
Rochester, NY	25	14	(56.0)	11	(44.0)	0	(0.0)
Sacramento-Arden Arcade-Roseville, CA	110	33	(30.0)	76	(69.1)	1	(0.9)
St. Louis, MO-IL	52	30	(57.7)	22	(42.3)	0	(0.0)
Salt Lake City, UT	26	9	(34.6)	17	(65.4)	0	(0.0)
San Antonio, TX	108	71	(65.7)	37	(34.3)	0	(0.0)
San Diego-Carlsbad-San Marcos, CA	315	81	(25.7)	234	(74.3)	0	(0.0)
San Francisco-Oakland-Fremont, CA	400	90	(22.5)	310	(77.5)	0	(0.0)
San Jose-Sunnyvale-Santa Clara, CA	229	25	(10.9)	201	(87.8)	3	(1.3)
Sarasota-Bradenton-Venice, FL	33	14	(42.4)	19	(57.6)	0	(0.0)
Scranton-Wilkes-Barre, PA	8	6	(75.0)	2	(25.0)	0	(0.0)
Seattle-Tacoma-Bellevue, WA	192	45	(23.4)	147	(76.6)	0	(0.0)
Springfield, MA	17	3	(17.6)	14	(82.4)	0	(0.0)
Stockton, CA	78	28	(35.9)	50	(64.1)	0	(0.0)
Syracuse, NY	14	5	(35.7)	9	(64.3)	0	(0.0)
Tampa-St. Petersburg-Clearwater, FL	123	76	(61.8)	47	(38.2)	0	(0.0)
Toledo, OH	12	10	(83.3)	2	(16.7)	0	(0.0)
Tucson, AZ	35	19	(54.3)	16	(45.7)	0	(0.0)
Tulsa, OK	27	19	(70.4)	8	(29.6)	0	(0.0)
Virginia Beach-Norfolk-Newport News, VA-NC	51	32	(62.7)	19	(37.3)	0	(0.0)
Washington-Arlington-Alexandria, DC-VA-MD-WV	421	101	(24.0)	319	(75.8)	1	(0.2)
Wichita, KS	30	13	(43.3)	17	(56.7)	0	(0.0)
Worcester, MA	32	3	(9.4)	29	(90.6)	0	(0.0)
Youngstown-Warren-Boardman, OH-PA	6	5	(83.3)	1	(16.7)	0	(0.0)
<b>Total - 97 Areas</b>	<b>10,745</b>	<b>4,044</b>	<b>(37.6)</b>	<b>6,658</b>	<b>(62.0)</b>	<b>43</b>	<b>(0.4)</b>
San Juan-Caguas-Guaynabo, PR	88	78	(88.6)	10	(11.4)	0	(0.0)

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

**Note:** See Technical Notes (page 9) for definition of MSA.

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# **Surveillance Slide Set 2006**



# **Tuberculosis in the United States**

## **National Surveillance System**

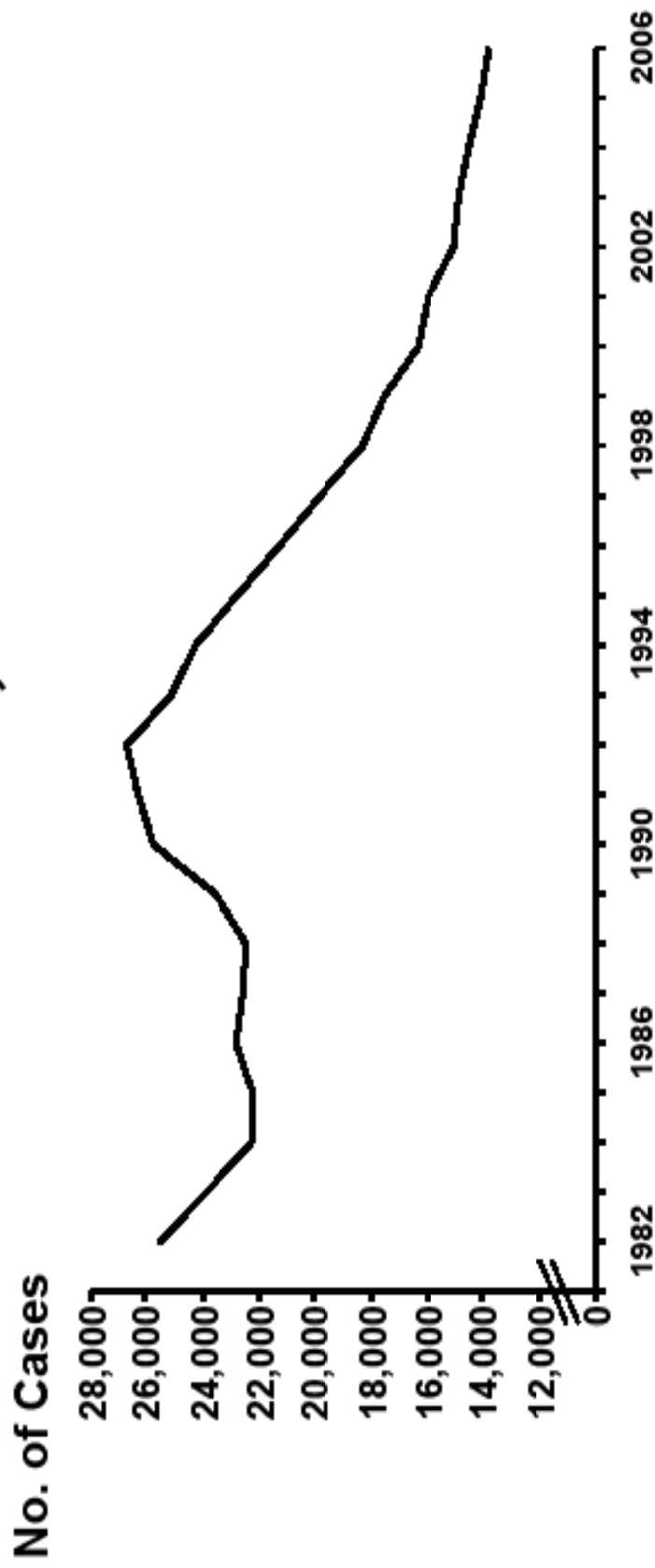
### **Highlights from 2006**

#### **Division of Tuberculosis Elimination**

#### **Centers for Disease Control and Prevention**



# Reported TB Cases\* United States, 1982–2006



\*Updated as of April 6, 2007.



# TB Morbidity

## United States, 2001–2006

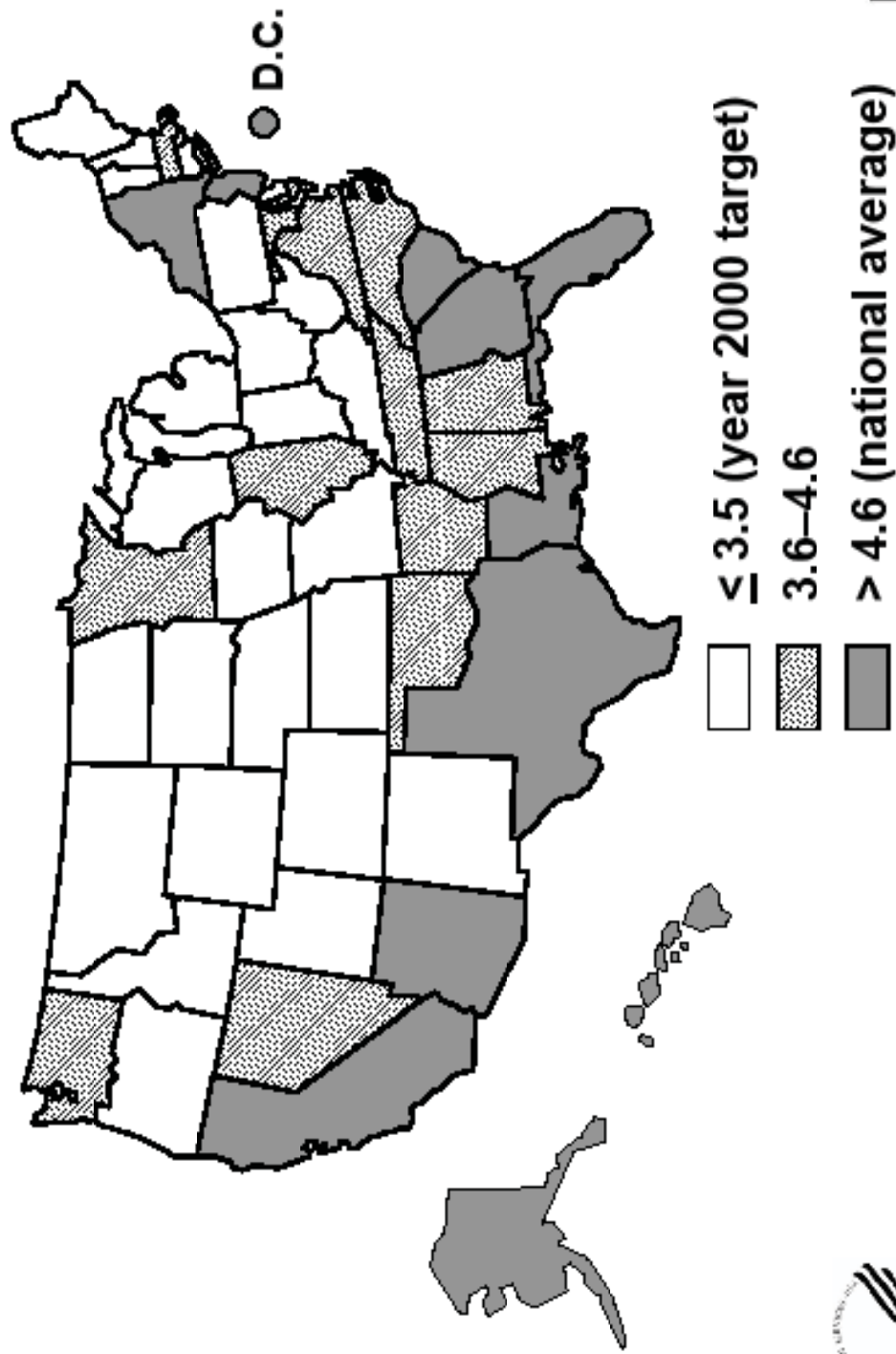
Year	Cases	Rate*
2001	15,945	5.6
2002	15,056	5.2
2003	14,838	5.1
2004	14,502	4.9
2005	14,080	4.7
2006	13,779	4.6

\*Cases per 100,000, updated as of April 6, 2007.





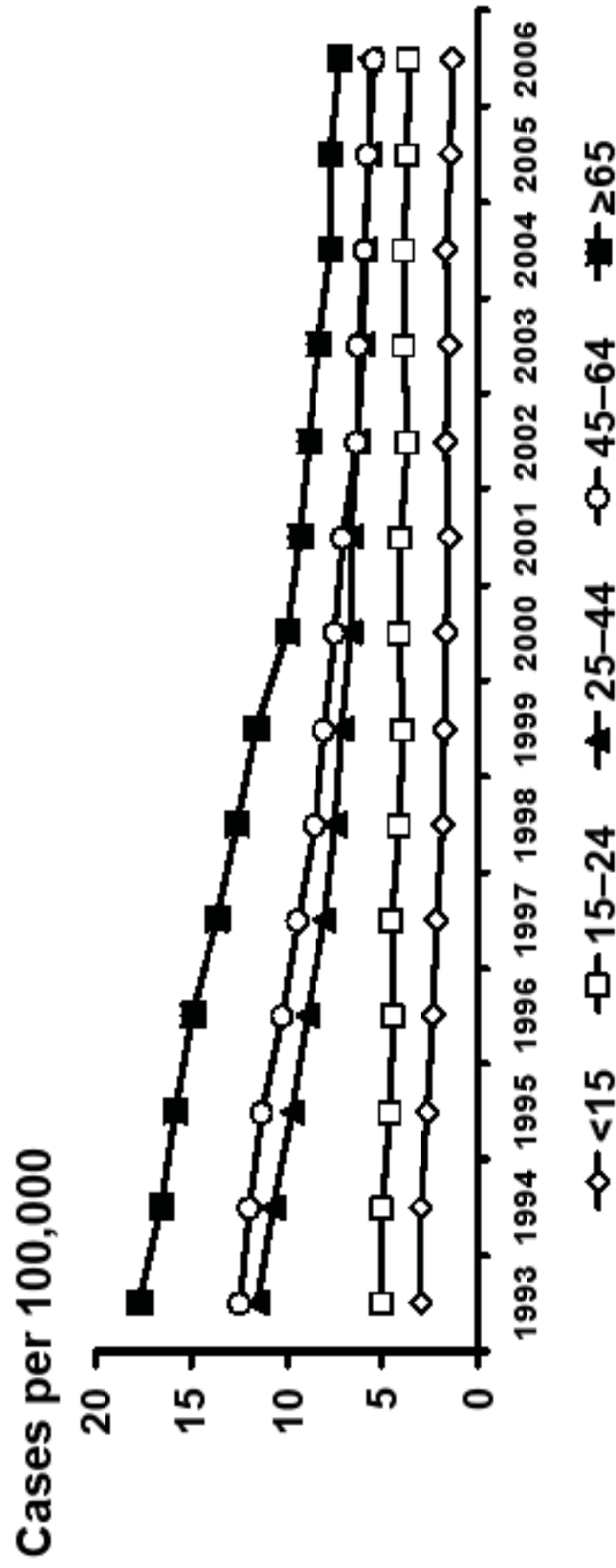
# TB Case Rates,\* United States, 2006



\*Cases per 100,000



# TB Case Rates\* by Age Group United States, 1993–2006

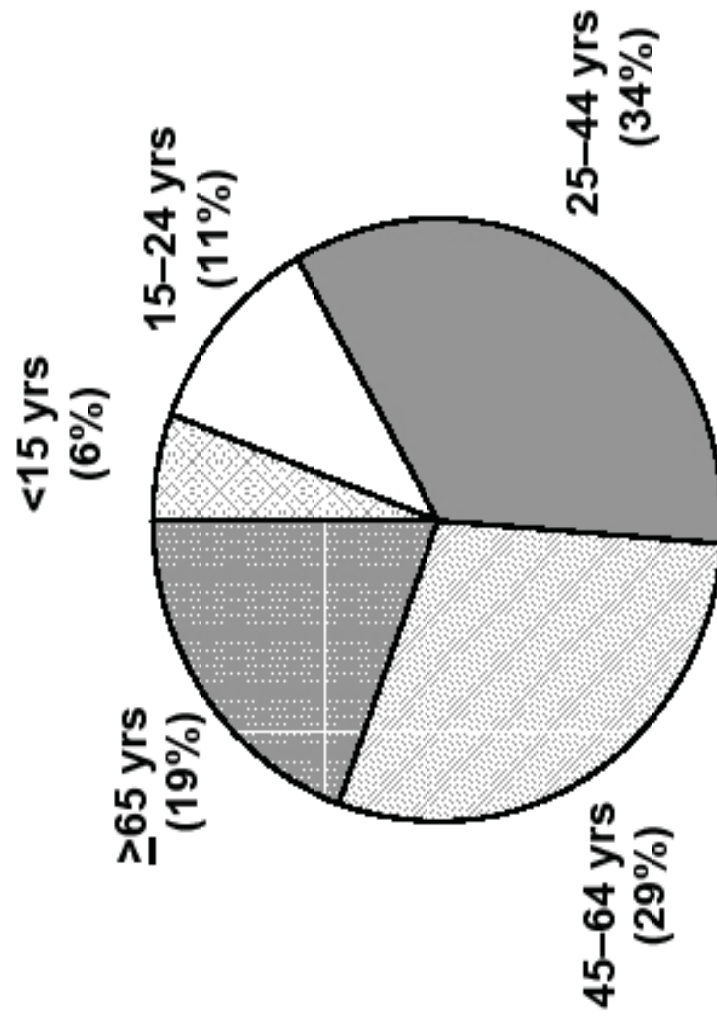


Age Group (years)

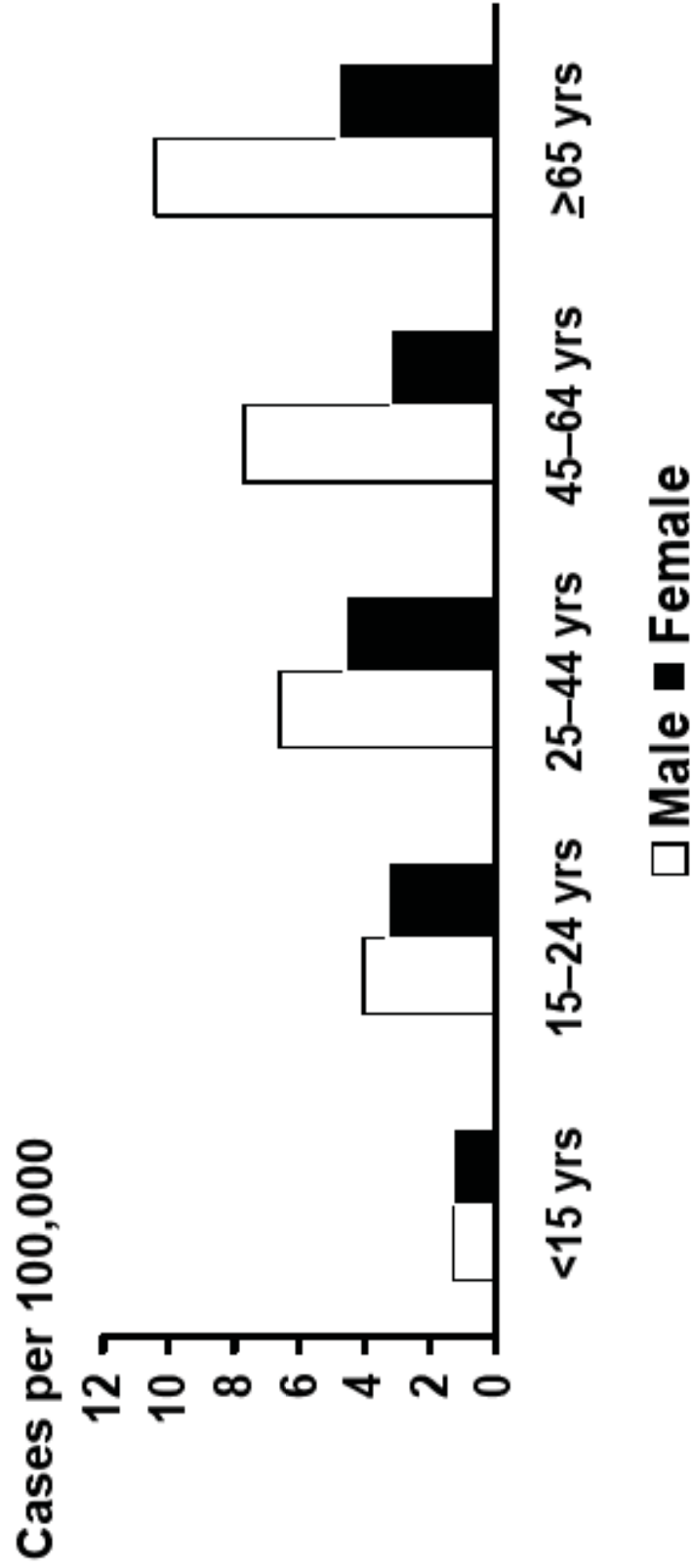
\*Updated as of April 6, 2007.



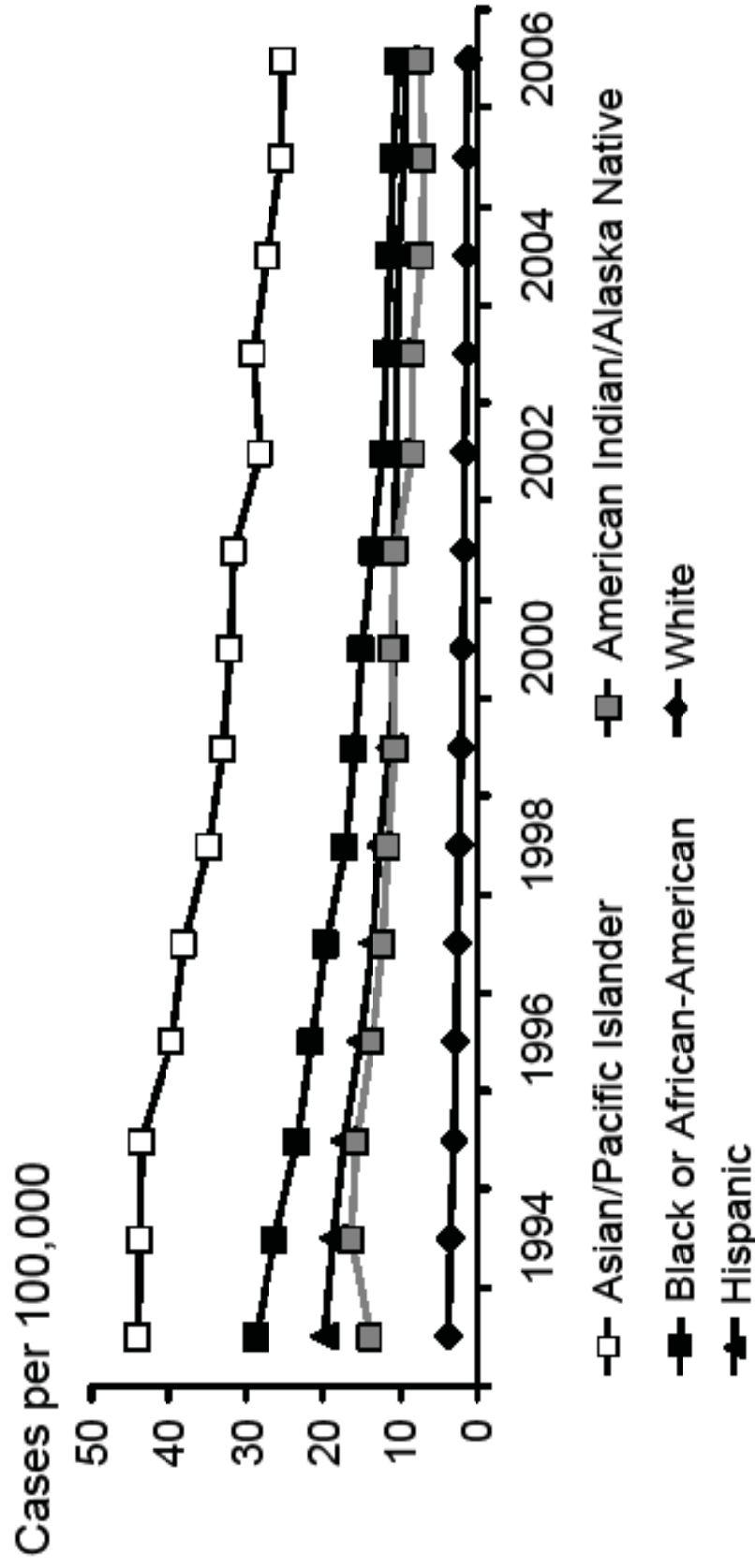
# Reported TB Cases by Age Group, United States, 2006



# TB Case Rates by Age Group and Sex, United States, 2006



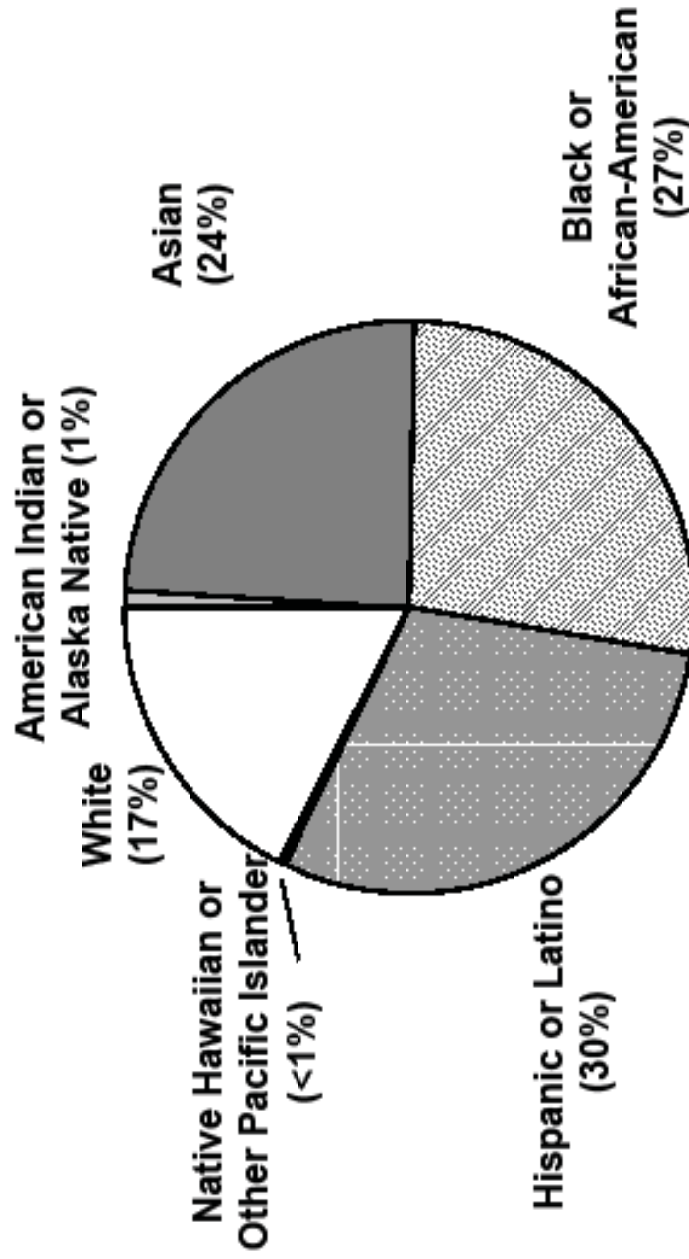
# TB Case Rates by Race/Ethnicity\* United States, 1993–2006\*\*



\*All races are non-Hispanic. In 2003, Asian/Pacific Islander category includes persons who reported race as Asian only and/or Native Hawaiian or Other Pacific Islander only.  
 \*\*Updated as of April 6, 2007.



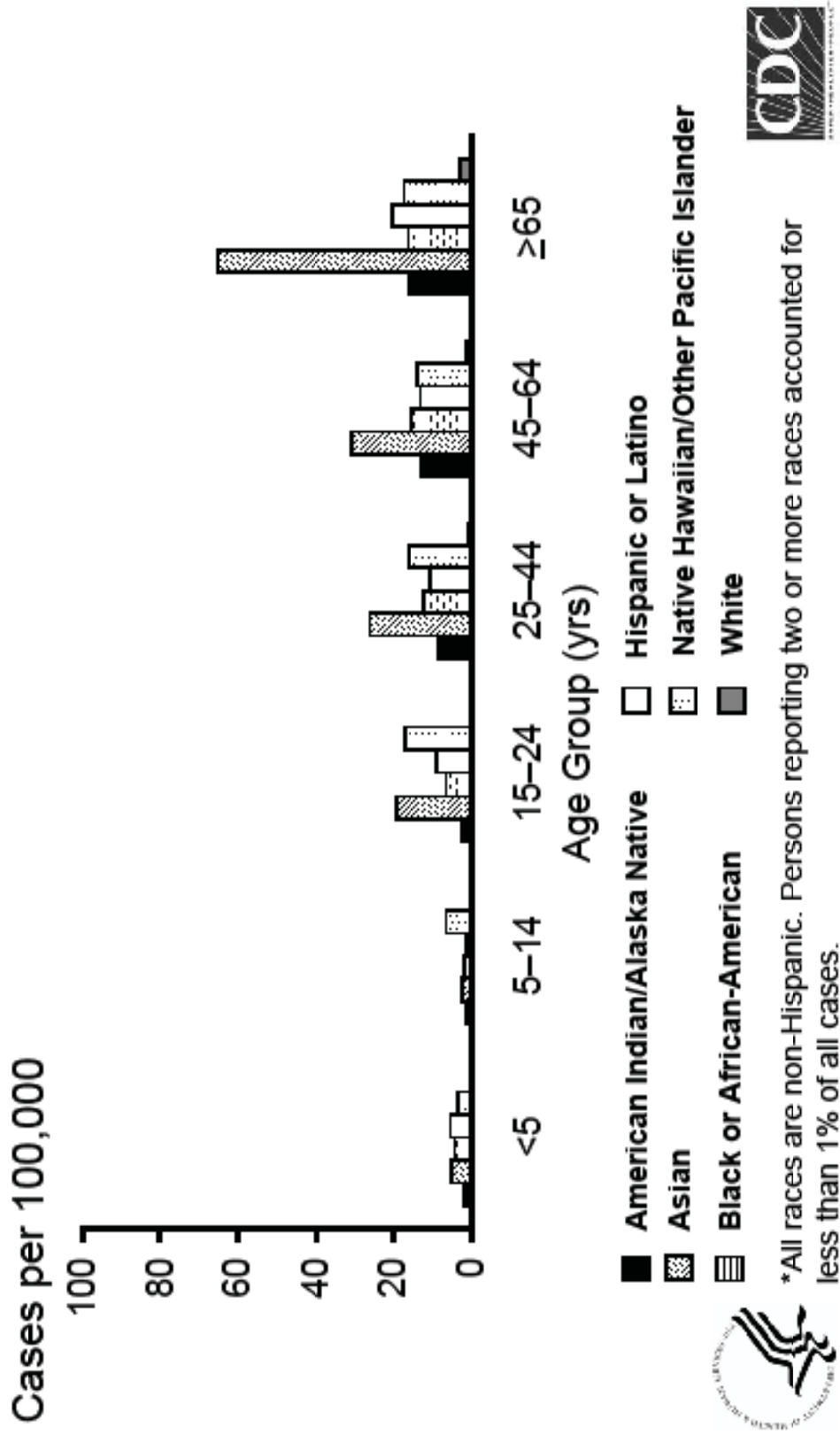
# Reported TB Cases by Race/Ethnicity\* United States, 2006



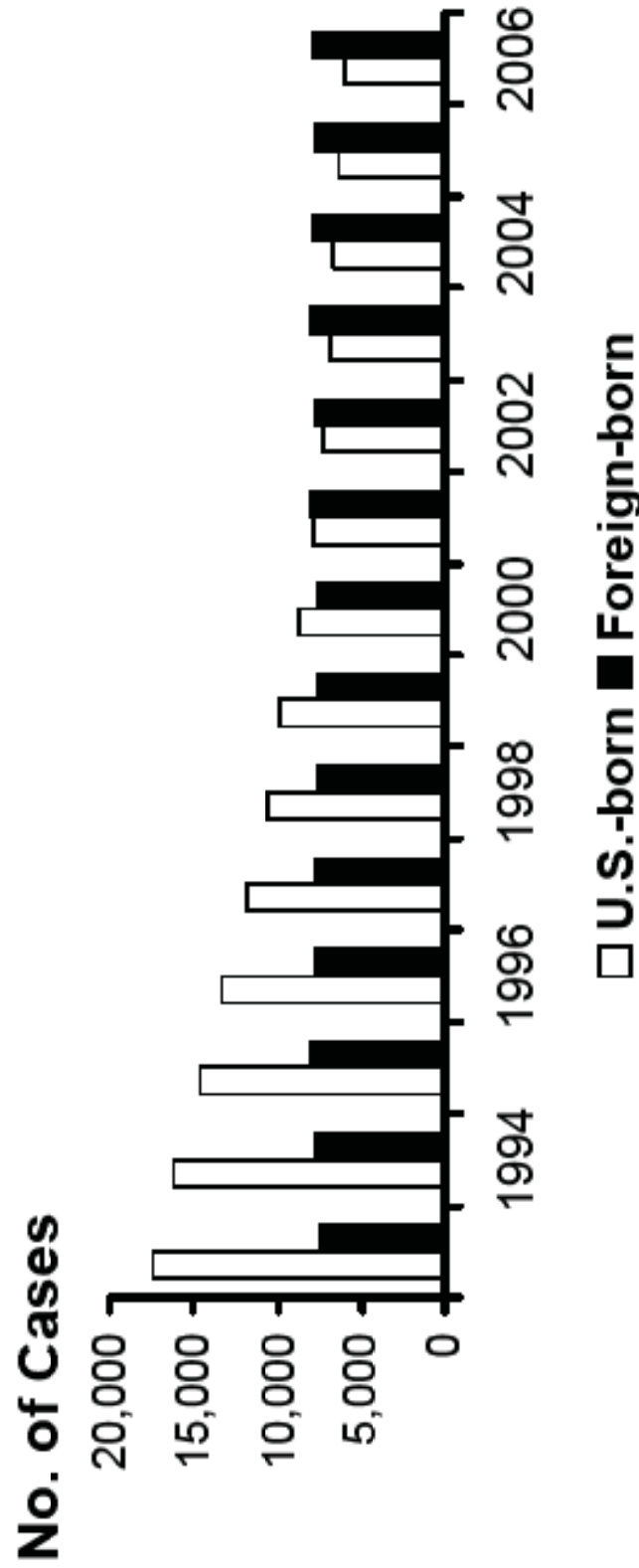
\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.



# TB Case Rates by Age Group and Race/Ethnicity,\* United States, 2006



# Number of TB Cases in U.S.-born vs. Foreign-born Persons United States, 1993–2006\*

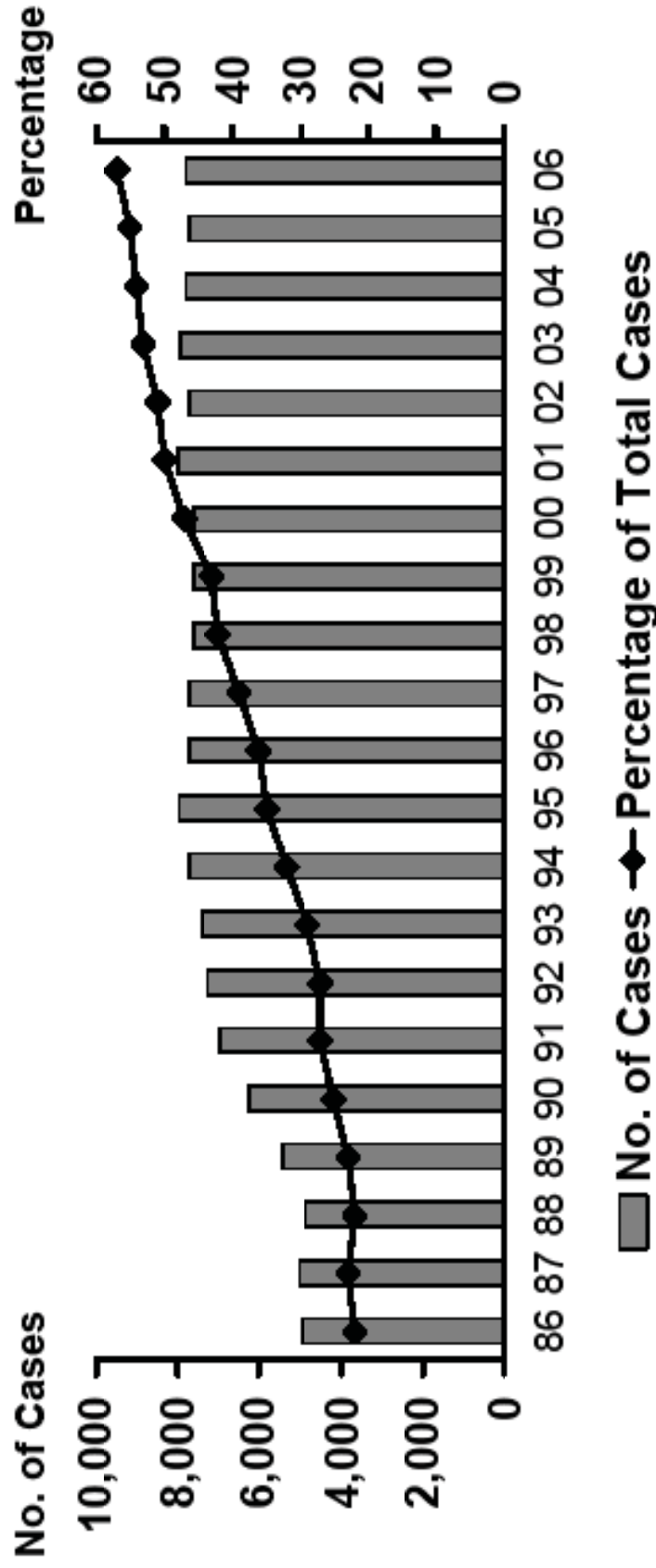


\*Updated as of April 6, 2007.





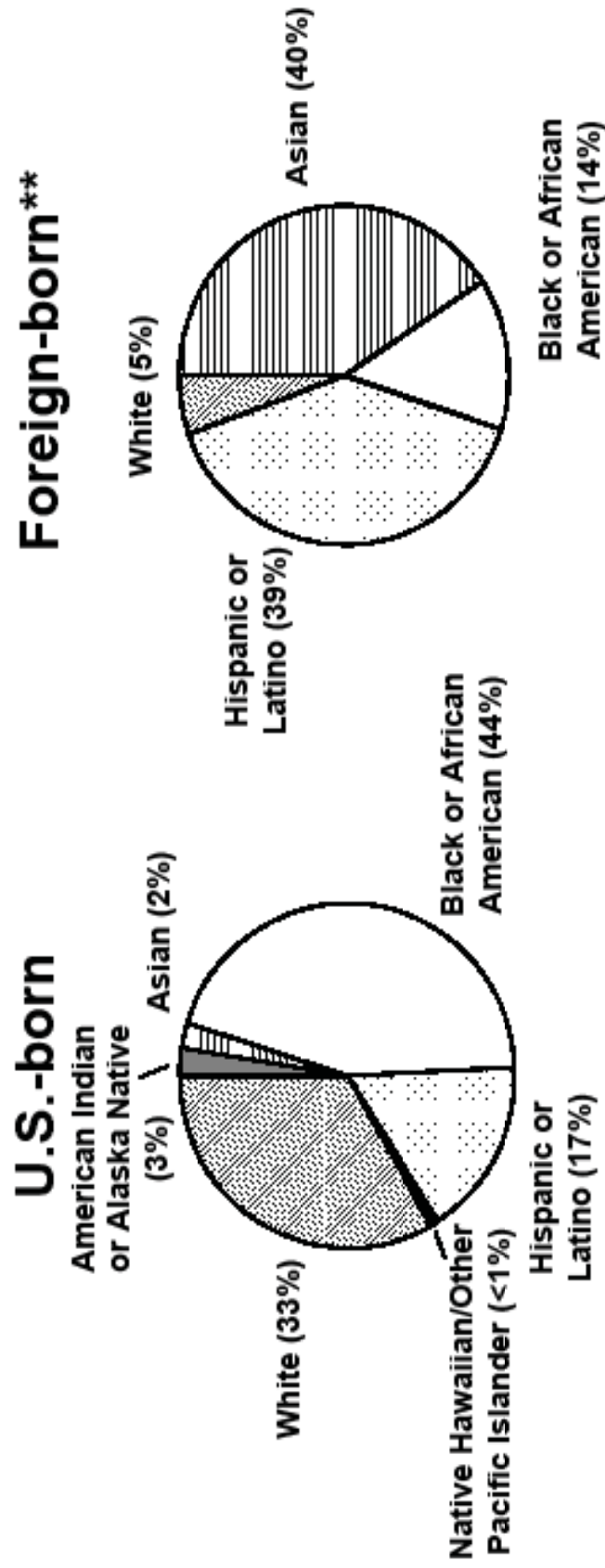
# Trends in TB Cases in Foreign-born Persons, United States, 1986–2006\*



\*Updated as of April 6, 2007.



# Reported TB Cases by Origin and Race/Ethnicity,\* United States, 2006



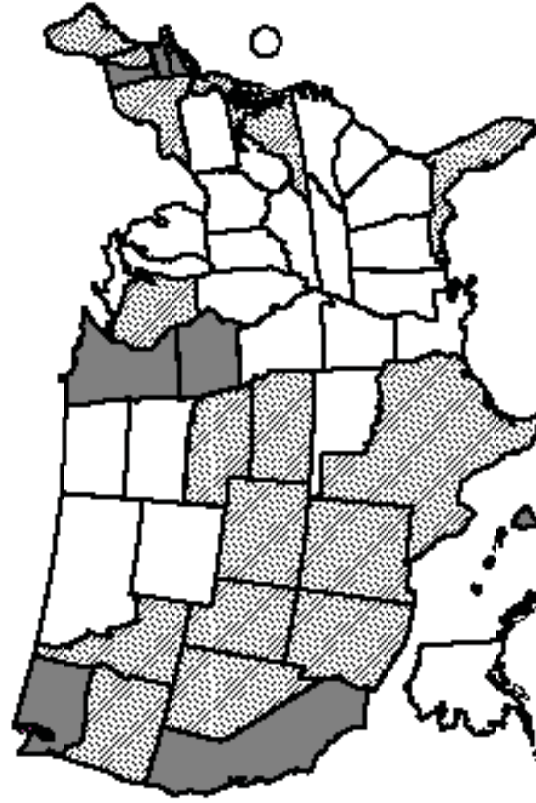
\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

\*\*American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

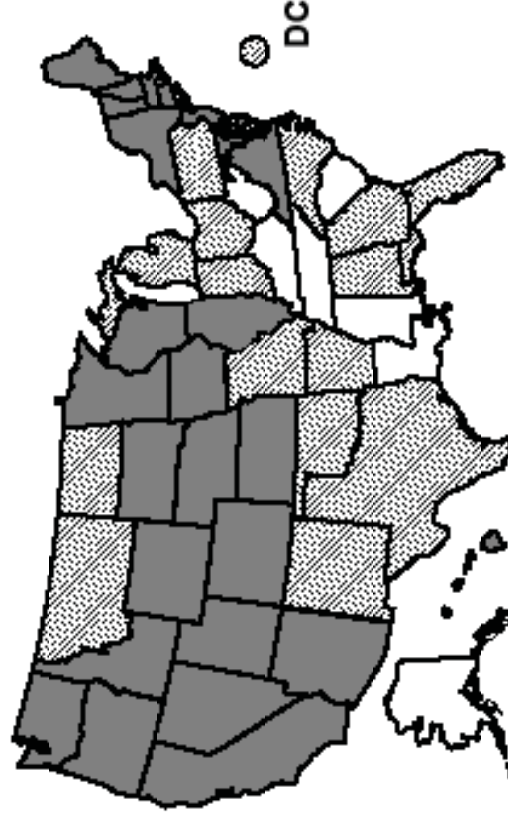


# Percentage of TB Cases Among Foreign-born Persons, United States\*

1996



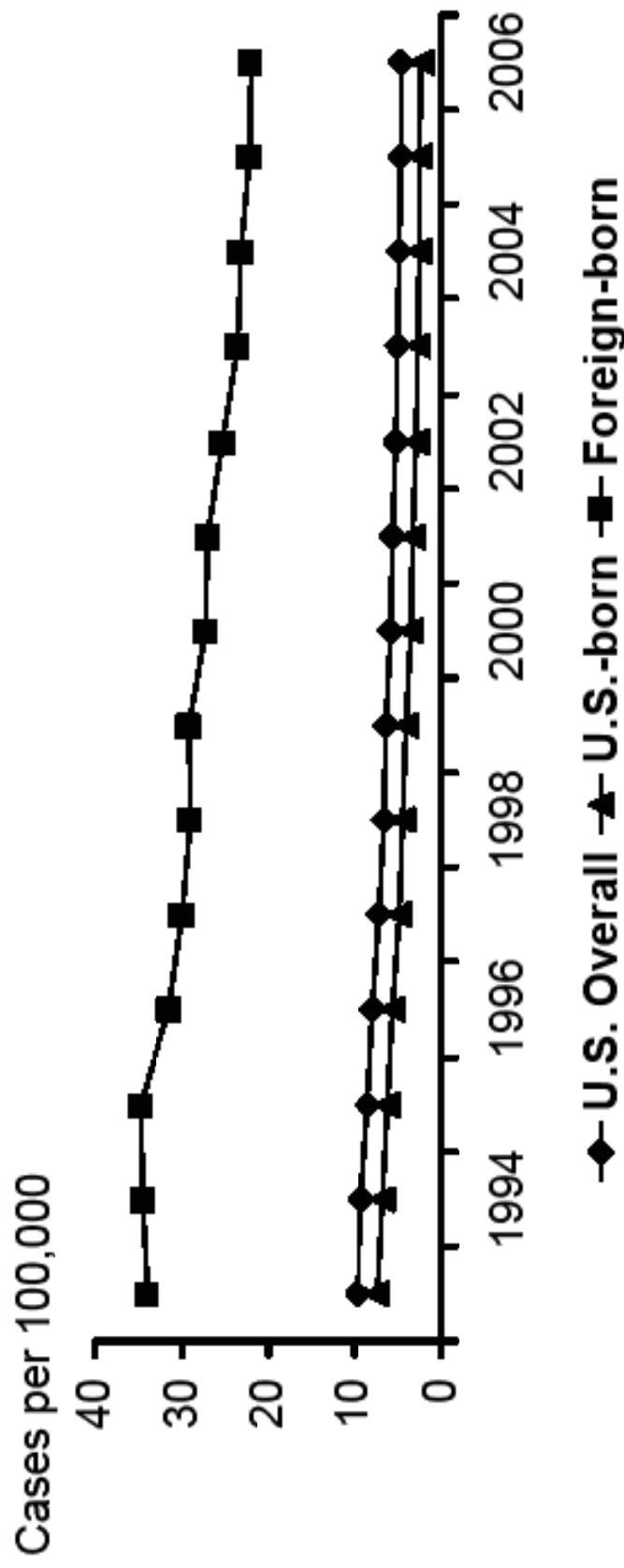
2006



\*Updated as of April 6, 2007.



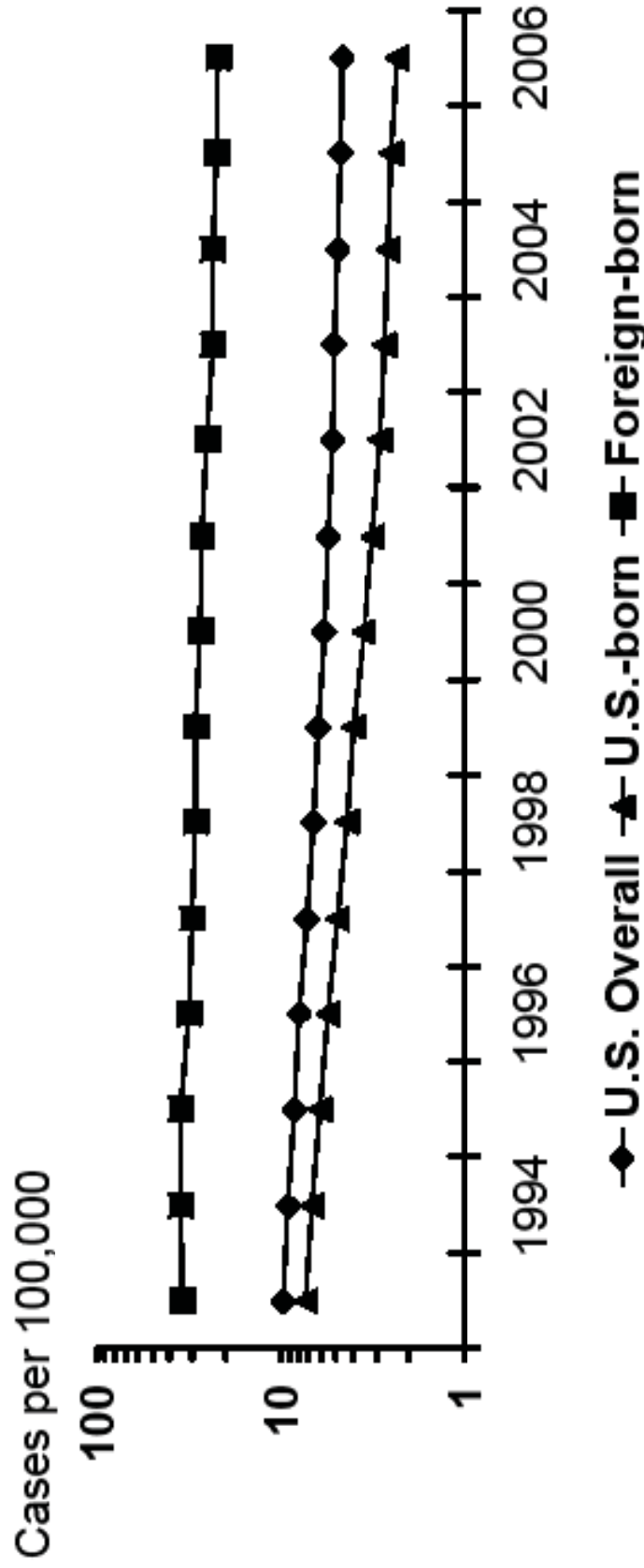
## TB Case Rates in U.S.-born vs. Foreign-born Persons United States, 1993–2006\*



\*Updated as of April 6, 2007.



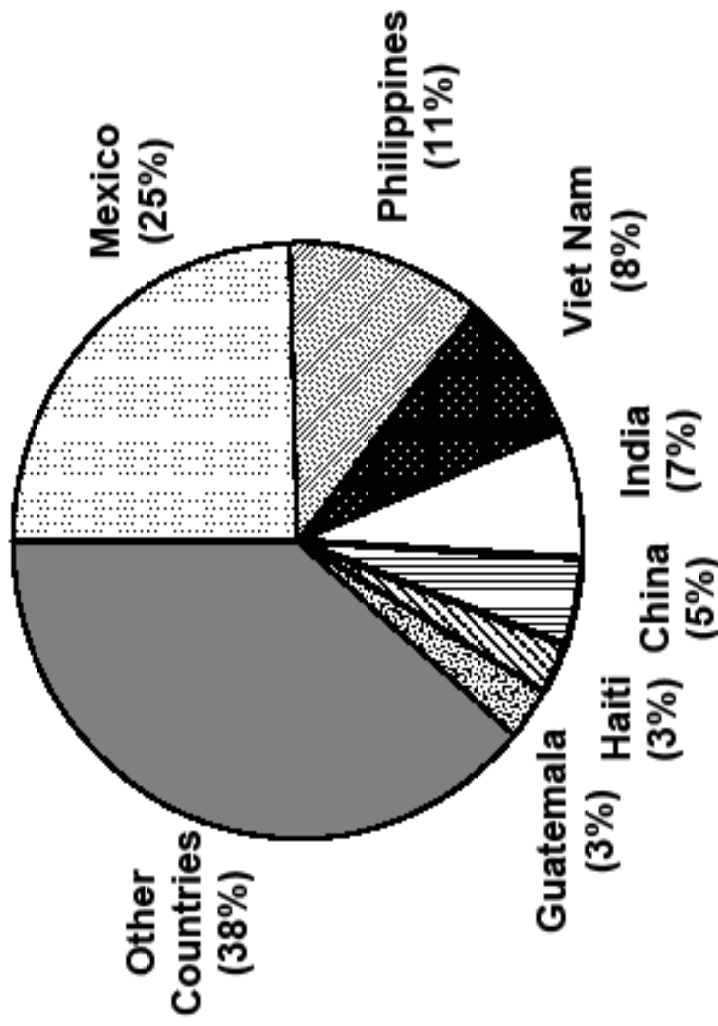
# TB Case Rates in U.S.-born vs. Foreign-born Persons United States,\* 1993–2006\*\*



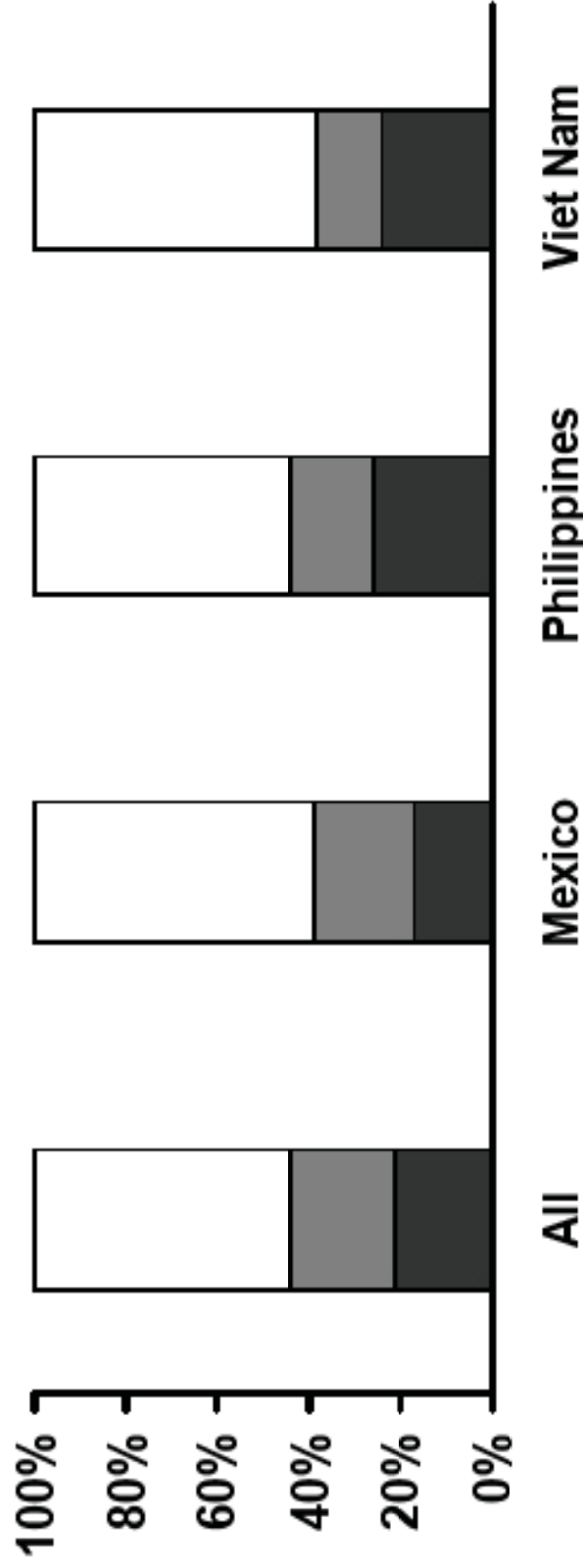
\*Includes the same data as slide 15, but rates presented on a logarithmic scale.  
 \*\*Updated as of April 6, 2007.



# Countries of Birth of Foreign-born Persons Reported with TB United States, 2006



# Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis,\* 2006

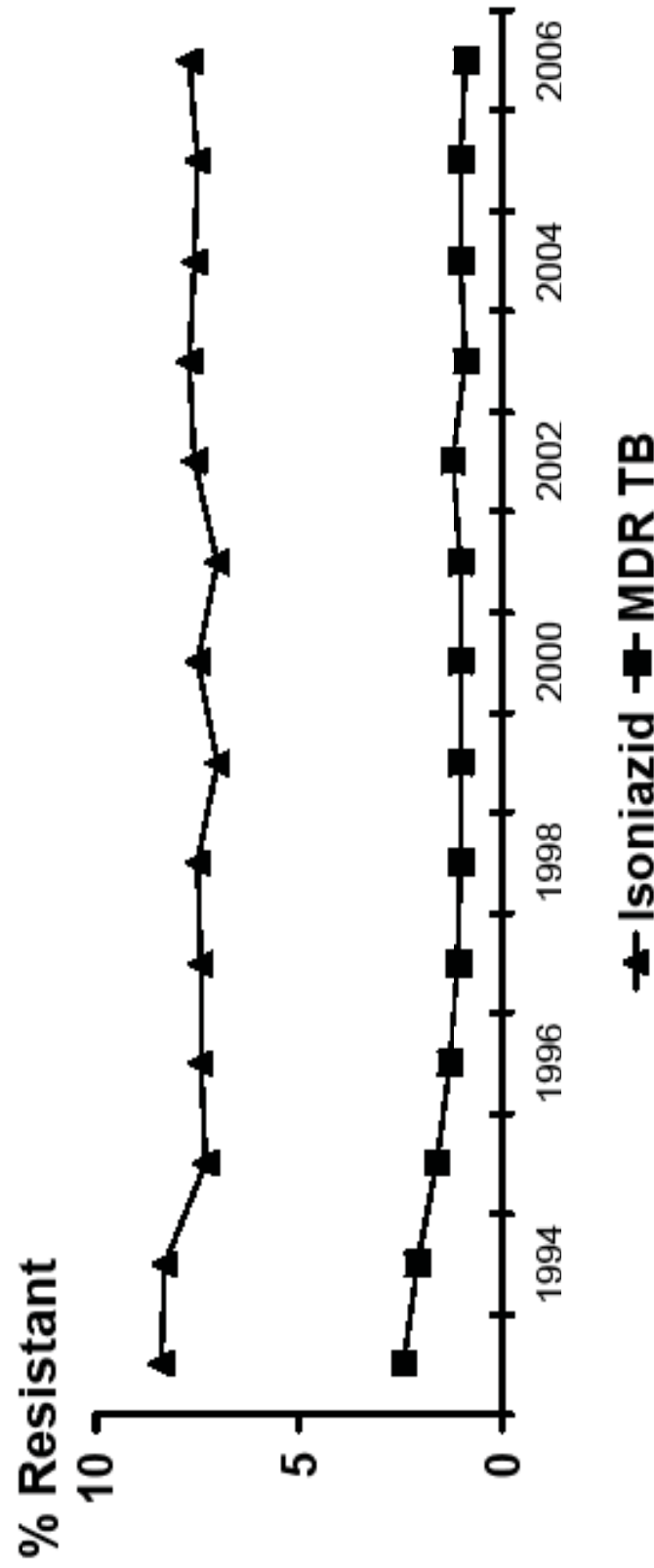


■ <1 yr ■ 1-4 yrs □ ≥5 yrs

\*Data exclude foreign-born TB patients for whom length of residence in the U.S. prior to diagnosis was unknown.



# Primary Anti-TB Drug Resistance United States, 1993–2006\*



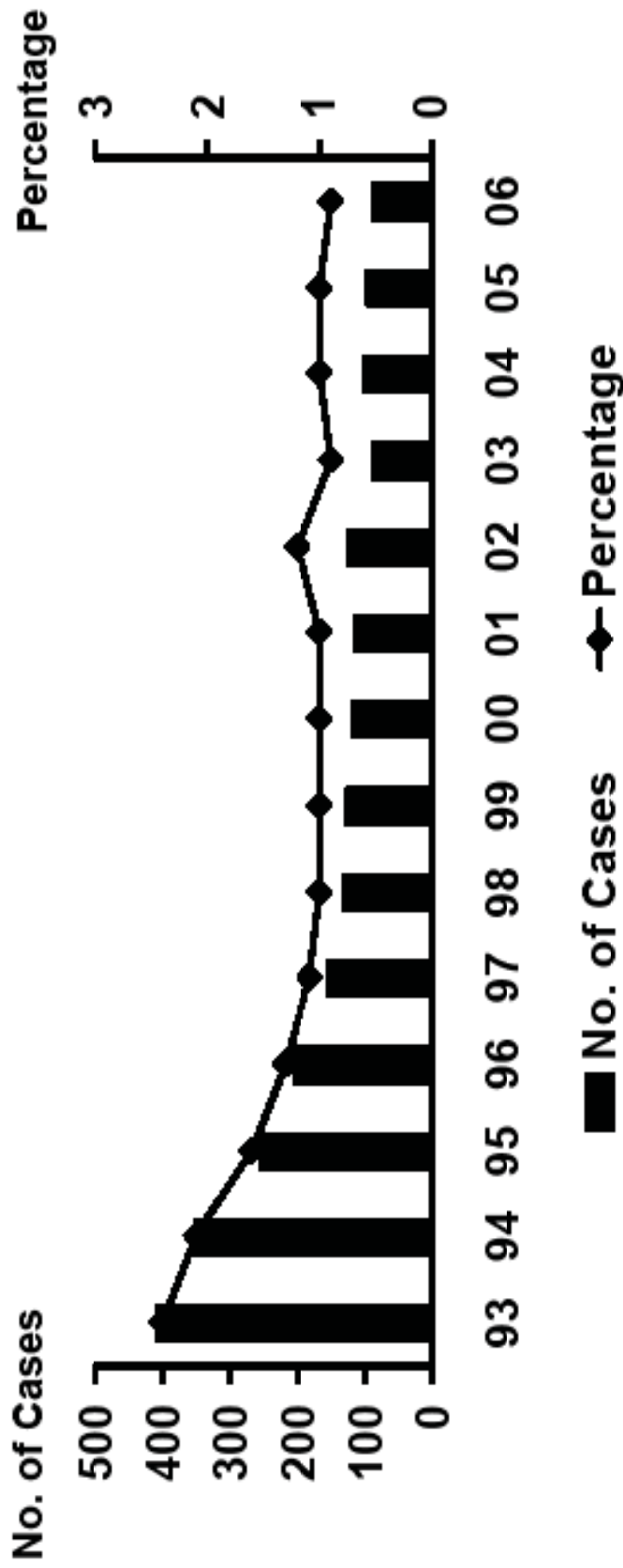
\*Updated as of April 6, 2007.

Note: Based on initial isolates from persons with no prior history of TB.  
MDR TB defined as resistance to at least isoniazid and rifampin.





# Primary MDR TB United States, 1993–2006\*

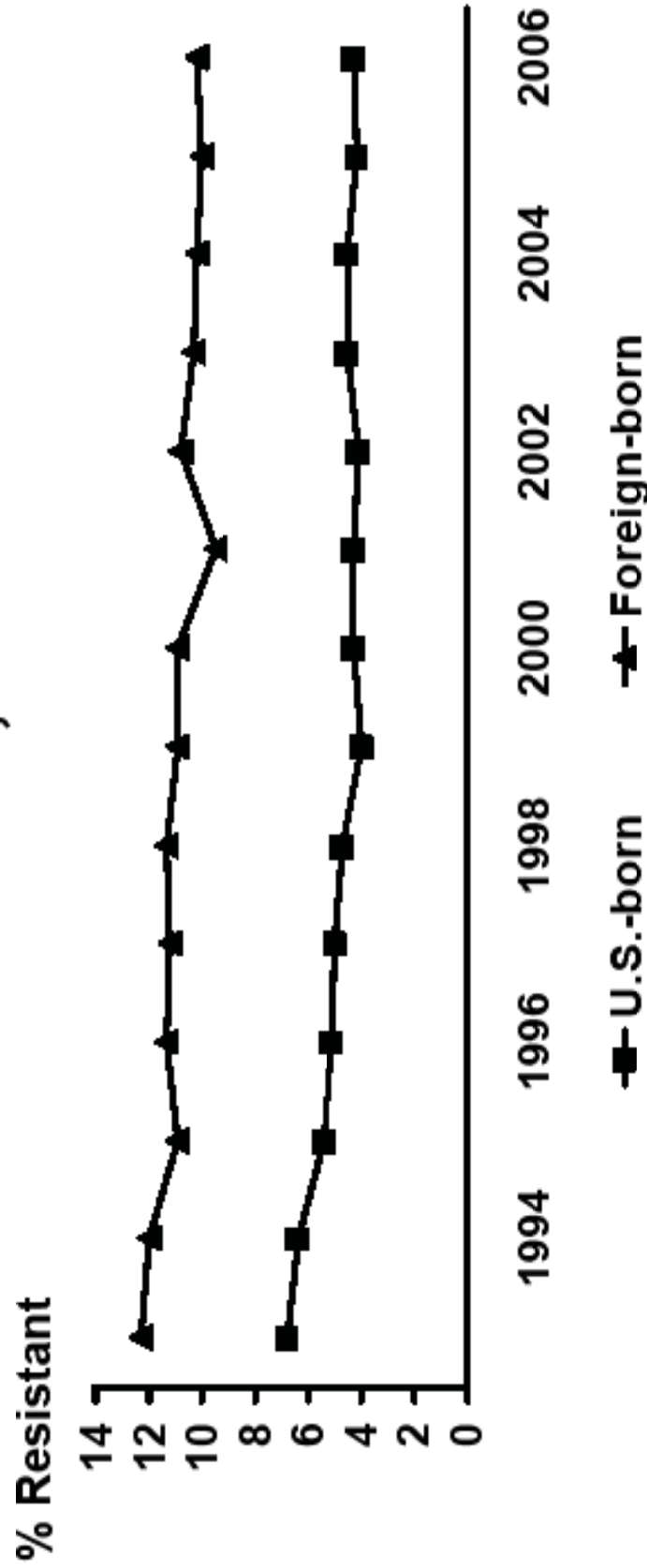


\*Updated as of April 6, 2007.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.



## Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons United States, 1993–2006\*

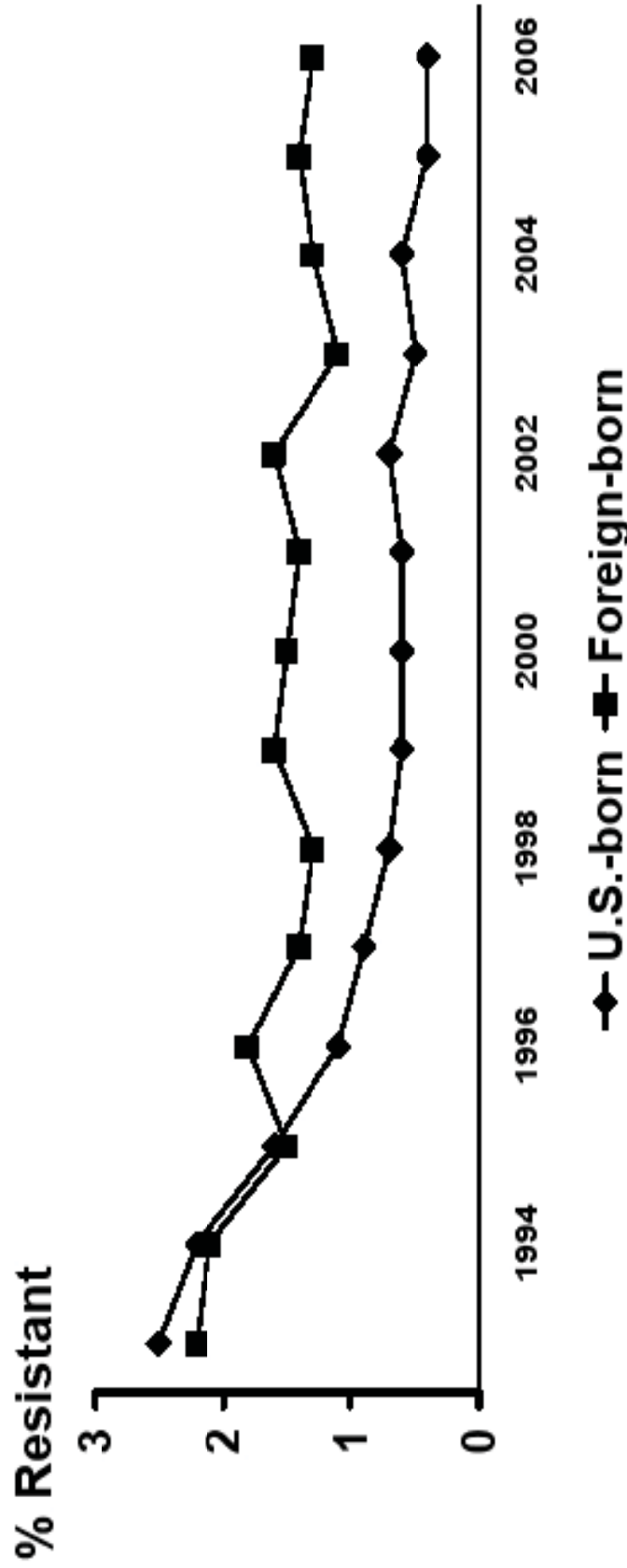


\*Updated as of April 6, 2007.

Note: Based on initial isolates from persons with no prior history of TB.



# Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2006\*

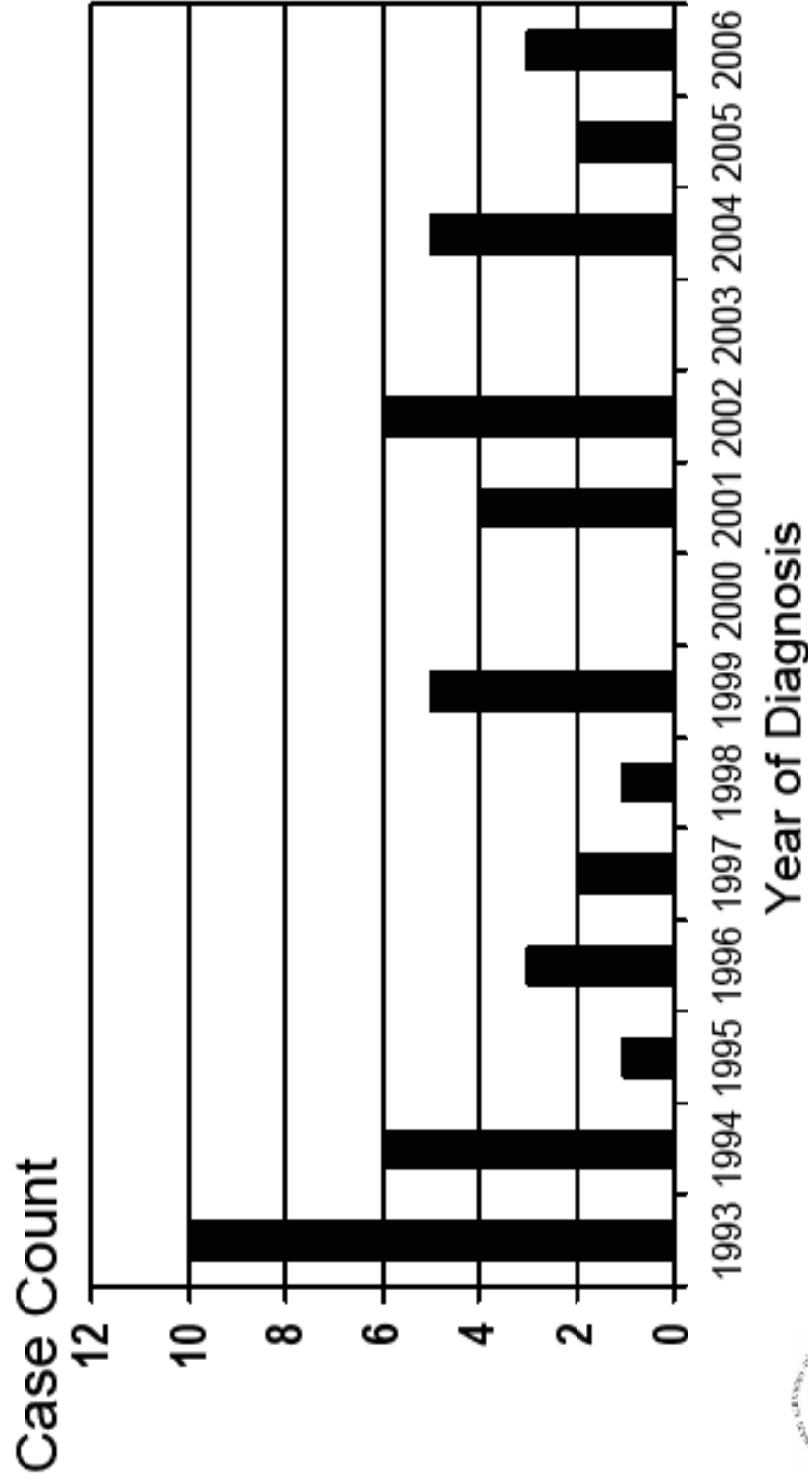


\*Updated as of April 6, 2007.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.



# XDR TB Counted Cases Defined on Initial DST<sup>†</sup> by Year, 1993–2006\*

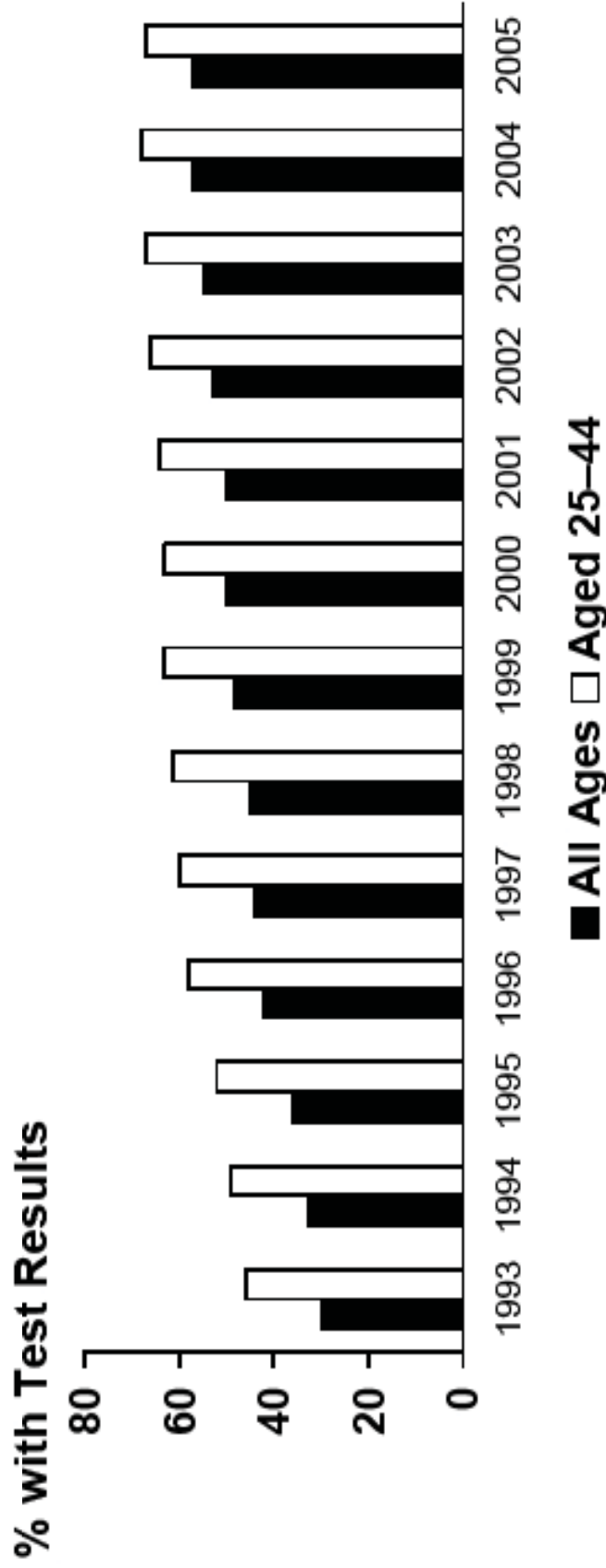


\*Reported incident cases as of July 18, 2007

<sup>†</sup>Drug Susceptibility test



# Reporting of HIV Test Results in Persons with TB by Age Group United States, 1993–2005\*

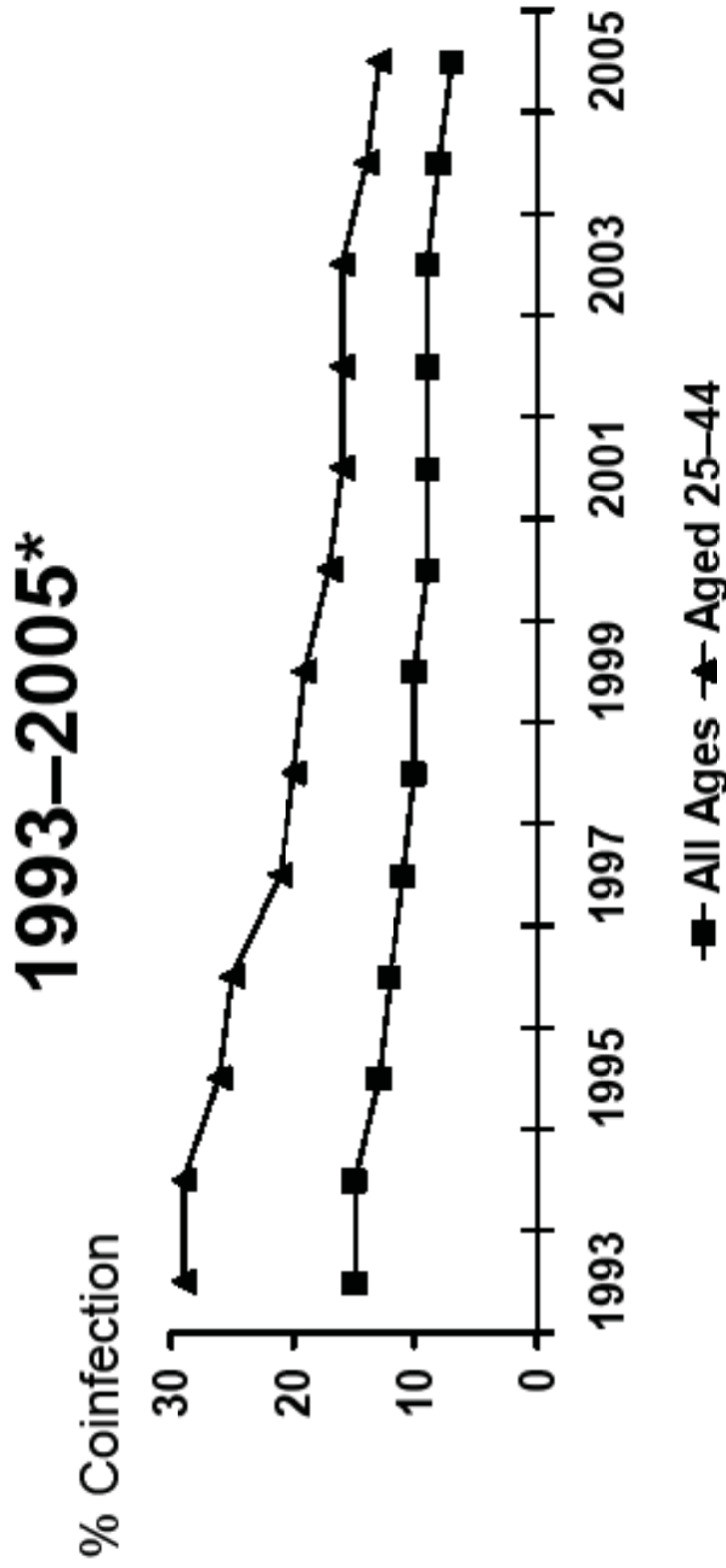


\*Updated as of April 6, 2007.

Note: Includes TB patients with positive, negative, or indeterminate HIV test results. Persons from California reported with AIDS only through 2004. (HIV test results are not reported from California)



# Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2005\*

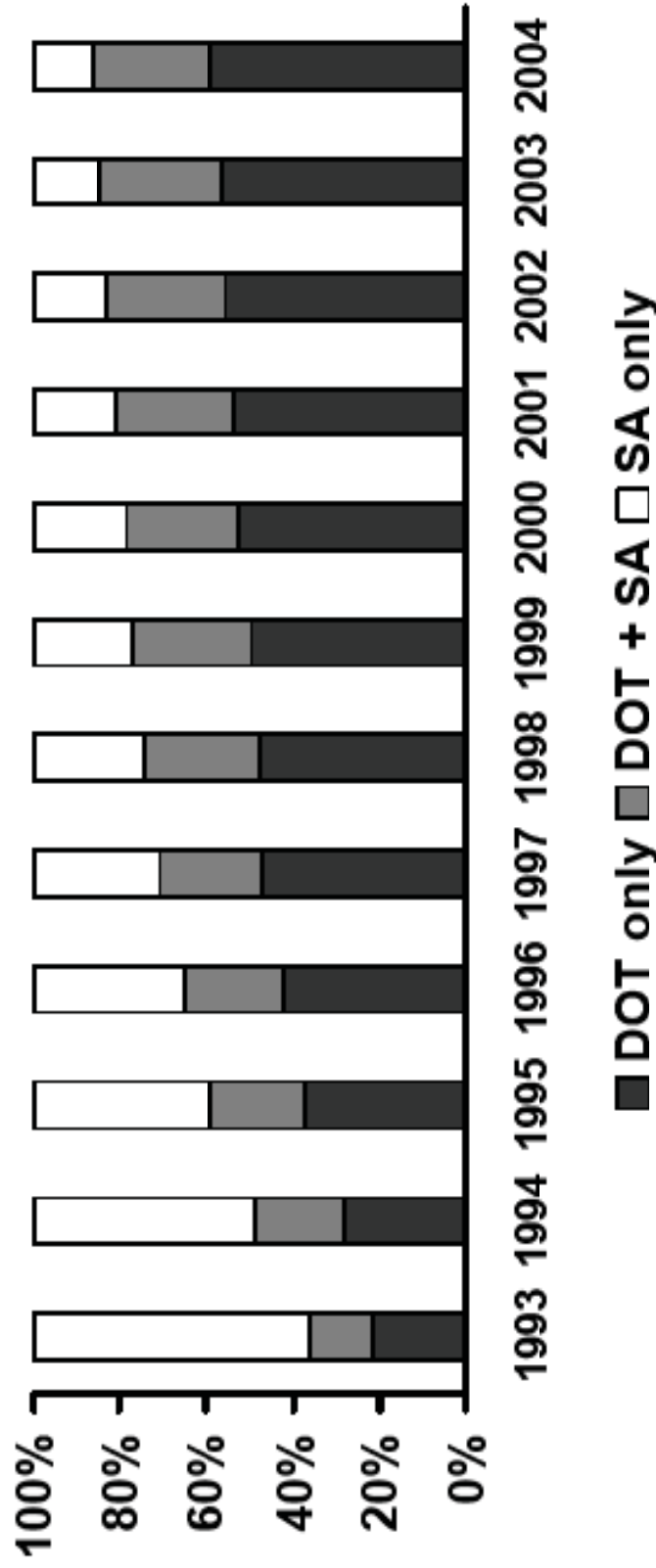


\*Updated as of April 6, 2007.

Note: Minimum estimates based on reported HIV-positive status among all TB cases in the age group.



# **Mode of Treatment Administration in Persons Reported with TB United States, 1993–2004\***

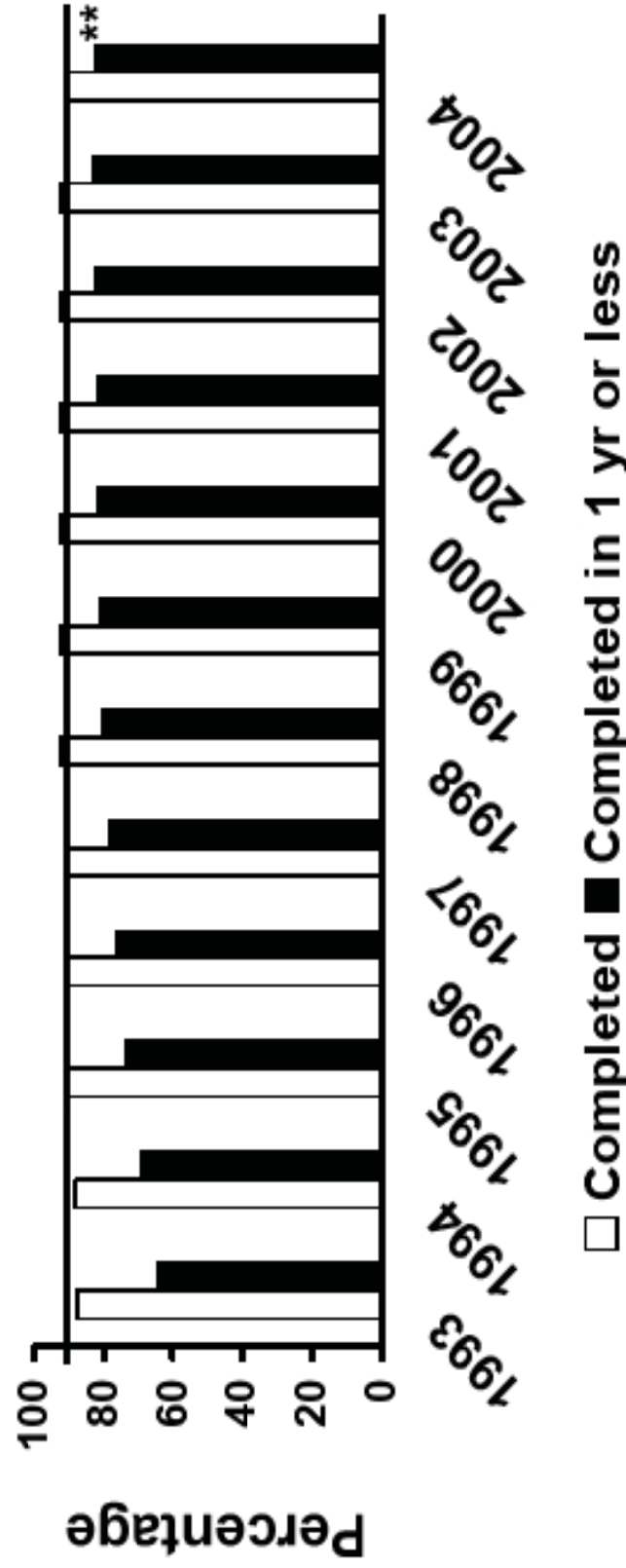


\*Updated as of April 6, 2007.

Directly observed therapy (DOT); Self-administered therapy (SA)



# Completion of TB Therapy United States, 1993–2004\*



\*Updated as of April 6, 2007.

\*\*Healthy People 2010 target: 90% completed in 1 yr or less.

Note: Persons with initial isolate resistant to rifampin and children under 15 years old with meningial, bone or joint, or miliary disease excluded.





## Tuberculosis in the United States

### National Tuberculosis Surveillance System Highlights from 2006

**Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2006.** This slide set was prepared by the Division of Tuberculosis Elimination, Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (DHHS). It provides trends for the recent past and highlights from data collected through the National Tuberculosis Surveillance System for 2006. Since 1953, through the cooperation of state and local health departments, CDC has collected information on the newly reported cases of tuberculosis (TB) disease in the United States. The data presented here were primarily collected via the expanded TB case report introduced in 1993. Currently, each individual TB case report (Report of Verified Case of Tuberculosis, or RVCT) is submitted electronically to CDC. The data for this slide set are based on updates received by CDC as of April 6, 2007. All case counts and rates for years 1993–2005 have been updated.

**Slide 2. Reported TB Cases, United States, 1982–2006.** The resurgence of TB in the mid-1980s was marked by several years of increasing case counts until its peak in 1992. Case counts began decreasing again in 1993, and 2006 marked the fourteenth year of decline in the total number of TB cases reported in the United States since the peak of the resurgence. From 1992 until 2002, the total number of TB cases decreased 5%–7% annually. From 2002 to 2003, however, the total number of TB cases decreased by only 1.4%. In 2006, a total of 13,779 cases were reported from the 50 states and the District of Columbia. This represents a decline of 2.1% from 2005 and of 48% from 1992. (*Note: A provisional total of 13,767 was reported in the MMWR in March 2007.*)

**Slide 3. TB Morbidity, United States, 2001–2006.** This slide provides the total number of reported U.S. TB cases and the associated TB rates for each of the past 6 years. Rate is defined as cases per 100,000 population. The number of TB cases decreased from 15,945 in 2001 to 13,779 in 2006, and the TB rate also decreased, from 5.6 in 2001 to 4.6 in 2006.

**Slide 4. TB Case Rates, United States, 2006.** This map shows TB rates for 2006. Twenty-six states had a rate of less than or equal to 3.5 TB cases per 100,000, the interim goal for the year 2000 established by the Advisory Council for the Elimination of Tuberculosis. This group of states has remained fairly constant over the last decade; five states (CT, MI, NM, OR, and PA) joined the group in 2000, one state (MO) joined the group in 2001 (also in 1998 for one year only), and one state (KY) joined the group in 2003. Twelve states and the District of Columbia (DC) reported a rate above the 2006 national average of 4.6 cases per 100,000: AK, AZ, CA, FL, GA, HI, LA, NJ, NY, SC, TN and TX. These 12 states and DC accounted for 65% of the national total and experienced substantial overall decreases in cases and rates from 1992 through 2006.

**Slide 5. TB Case Rates by Age Group, United States, 1993–2006.** This slide shows the last 14 years' declining trend in TB rates by age group. The largest declines occurred in persons 65 years and older (from 17.7 per 100,000 in 1993 to 7.2 in 2006), in adults aged 45 to 64 years (from 12.4 to 5.4), in adults aged 25 to 44 years (from 11.5 to 5.6), and in children under 15 years of age (from 2.9 to 1.3), each group having decreased approximately 50%. The rate declined by 28% in those 15 to 24 years of age (from 5.0 to 3.6).

**Slide 6. Reported TB Cases by Age Group, United States, 2006.** This pie chart shows the age distribution of persons reported with TB in 2006. Six percent were children under 15 years of age and 11% were 15- to 24-year-olds, whereas 34% were 25 to 44 years of age, 29% were 45- to 64-year-olds, and 19% were at least 65 years old.

**Slide 7. TB Case Rates by Age Group and Sex, United States, 2006.** This slide graphs the TB rates in 2006 by age group and sex. It shows that rates tended to increase with age, ranging from a low of less than 2 per 100,000 in children to a high of approximately 10 per 100,000 in men 65 years and older. The rates in men 45 years and older were more than twice those in same-age women.

**Slide 8. TB Case Rates by Race/Ethnicity, United States, 1993–2006.** This slide shows the declining trend in TB rates by race/ethnicity during the last 14 years. Asians and Pacific Islanders had the highest TB rates, which declined from 44.1 per 100,000 in 1993 to 25.2 in 2006, and had the smallest percentage decline over the time period (43%). Rates declined by approximately 50% or more over the time period in the other racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 28.5 in 1993 to 10.2 in 2006; among Hispanics, from 19.9 to 9.2; among American Indians and Alaska Natives, from 13.9 to 7.4; and among non-Hispanic whites, from 3.6 to 1.2. Since 2003, the Asian and Pacific Islander race category has included persons who reported race as either 1) Asian only or 2) Native Hawaiian or Other Pacific Islander only. Although these categories were reported separately beginning in 2003, they were merged for this slide to allow for continuity in reporting trends.

Several important factors likely contribute to the disproportionate burden of TB in minorities. In persons who were born in countries where TB is common, TB disease may result from infection acquired in the country of origin. Unequal distribution of TB risk factors, such as HIV infection, may also contribute to increased exposure to TB or to an increased risk of developing TB once infected with *M. tuberculosis*.

**Slide 9. Reported TB Cases by Race/Ethnicity, United States, 2006.** In 2006, 83% of all reported TB cases occurred in racial and ethnic minorities (30% in Hispanics, 27% in non-Hispanic blacks or African-Americans, 24% in Asians, 1% in American Indians or Alaska Natives, and <1% in Native Hawaiians or Other Pacific Islanders), whereas 17% of cases occurred in non-Hispanic whites. Persons reporting two or more races totaled less than 1% of all cases. This is the third year that Hispanics have constituted the single largest percentage of TB cases among all racial/ethnic groups.

**Slide 10. TB Case Rates by Age Group and Race/Ethnicity, United States, 2006.** This slide presents TB rates in 2006 by age group and race/ethnicity. Risk increased with age across racial and ethnic groups, and rates were consistently higher in minority racial and ethnic groups than in non-Hispanic whites. Rates were the highest in Asians and Native Hawaiians and Other Pacific Islanders, particularly in adult age groups. The impact of foreign birth is a consideration in interpreting rate variations by race/ethnicity. For example, 96% of cases in the Asian group occurred in foreign-born persons, compared with 75% of cases in Hispanics and 30% of cases in non-Hispanic blacks or African-Americans. Persons reporting two or more races totaled less than 1% of all cases.

**Slide 11. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2006.** This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2006. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 57% in 2006. Overall, the number of cases in foreign-born persons remained virtually level, with approximately 7,000–8,000 cases each year, whereas the number in U.S.-born persons decreased from more than 17,000 in 1993 to less than 6,000 in 2006.

**Slide 12. Trends in TB Cases in Foreign-born Persons, United States, 1986–2006.** This slide shows trends in TB cases in foreign-born persons in the United States from 1986, when information on country of birth was first reported by all areas submitting reports to CDC, through 2006. The number of TB cases in foreign-born persons increased from nearly 5,000 in 1986 to 7,000–8,000 each year since 1991. The percentage of TB cases accounted for by foreign-born persons increased from 22% in 1986 to 57% in 2006.

**Slide 13. Reported TB Cases by Origin and Race/Ethnicity, United States, 2006.** Among U.S.-born persons with TB in 2006, 44% were non-Hispanic black or African-American, 33% were non-Hispanic white, 17% were Hispanic or Latino, 3% were American Indian or Alaska Native, 2% were Asian, and <1% were Native Hawaiian or Other Pacific Islander. Among the foreign-born, 40% were Asian, 39% were Hispanic or Latino, 14% were non-Hispanic black or African-American, and 5% were non-Hispanic white. Cases among American Indians or Alaska Natives and among Native Hawaiians or Other Pacific Islanders constituted less than 1%, respectively, of the cases among the foreign-born and are not shown. Persons reporting two or more races totaled less than 1% of all cases.

**Slide 14. Percentage of TB Cases Among Foreign-born Persons, United States, 1996 and 2006.** The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 1996 and 2006 in these side-by-side maps. The number of states with at least 50% of cases in the foreign-born increased from nine in 1996 to 27 in 2006. The number of states with at least 70% of cases in the foreign-born increased from two (HI and VT) in 1996 to eleven (CA, HI, IA, MA, MN, NE, NH, NJ, NY, RI and WA) in 2006 (not shown on slide).

**Slide 15. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2006.** TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2006, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 2.3, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 22.0.

**Slide 16. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2006.** This is the same as Slide 15, but the rates are presented on a logarithmic scale to better illustrate the trend in TB rates among the U.S.-born and foreign-born. The lines show a greater rate of decline among the U.S.-born compared with the foreign-born during this period.

**Slide 17. Countries of Birth of Foreign-born Persons Reported with TB, United States, 2006.** This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2006, with the top seven highlighted. The list of countries has remained relatively constant since 1986, when information on country of birth was first reported by all areas submitting reports to CDC. However, for 2006, Guatemala replaced South Korea in the list of countries contributing the highest percentages of foreign-born patients. The seven top countries accounted for 62% of the total, with Mexico accounting for 25%; the Philippines, 11%; Viet Nam, 8%; India, 7%; China, 5%; Haiti, 3%; and Guatemala, 3%. Persons from more than 135 other countries each accounted for 2% or less of the total, but altogether accounted for 38% of foreign-born persons reported with TB.

**Slide 18. Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2006.** The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2006 is shown in these stacked bars. Overall, 21% had been in the United States for less than 1 year, 23% between 1 and 4 years, and 56% for at least 5 years. The distribution is also shown for the top three countries of birth: Mexico, the Philippines, and Viet Nam. Among persons born in Mexico, 17% had been in the United States for less than 1 year, 22% between 1 and 4 years, and 61% for at least 5 years. Among persons born in the Philippines, 26% had been in the United States for less than 1 year, 18% between 1 and 4 years, and 56% for at least 5 years. Among persons born in Viet Nam, 24% had been in the United States for less than 1 year, 14% between 1 and 4 years, and 62% for at least 5 years.

**Slide 19. Primary Anti-TB Drug Resistance, United States, 1993–2006.** Primary drug resistance is shown for the past 13 years. The graph starts in 1993, the year in which the individual TB case reports submitted to the national surveillance system began collecting information on initial susceptibility test results for patients with culture-positive TB. Data were available for more than 85% of culture-positive cases for each year. Primary resistance was calculated by using data from persons with no reported prior TB episode. Resistance to at least isoniazid remained between 7.0% and 8.4%. However, resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), decreased from 2.4% in 1993 to 1.1% in 1997, and remained at approximately 1 % up to and including 2006.

**Slide 20. Primary MDR TB, United States, 1993–2006.** This graph focuses on trends in primary MDR TB (based on initial isolates from persons with no prior history of TB) in the United States from 1993 through 2006. The number of MDR TB cases, represented by bars, steadily declined from 410 in 1993 to 116 in 2001. Since then the total number of MDR TB cases has fluctuated from 91 to 126 cases, with 91 cases reported for 2006. Primary MDR TB, shown by the line, decreased from 2.4% in 1993 to approximately 1.1% in 1997, and remained approximately at 1% up to and including 2006.

**Slide 21. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2006.** This graph shows primary isoniazid resistance in U.S.-born vs. foreign-born persons. Based on initial isolates from persons with no prior history of TB, the percentage of isoniazid resistance was approximately two times higher among foreign-born persons than among U.S.-born persons. In foreign-born persons, the percentage declined from 12.3% in 1993 to 10.2% in 2006. In U.S.-born persons, the percentage decreased from 6.8% in 1993 to 4.3% in 2006.

**Slide 22. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2006.** This graph highlights primary MDR TB in U.S.-born versus foreign-born persons. The percentage with primary MDR TB has declined among both groups, although the decline in the U.S.-born has been greater. As a result, the proportion of primary MDR TB cases reported in foreign-born persons increased from approximately 26% of all MDR TB cases in 1993 to approximately 73% of all MDR TB cases in 1999, and continued at this proportion through 2006 (not shown on slide). Among the U.S.-born, the percentage with MDR TB remained between 0.5% and 0.7% from 1998 through 2004 and dropped to 0.4% in 2005. The percentage among foreign-born persons has fluctuated year by year, while averaging approximately 1.4% from 1998 through 2006.

**Slide 23. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2006.** This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993–2006, reported as of July 18, 2007. Three XDR TB cases were reported in 2006. The most reported in a single year was 10 in 1993, while there were no cases reported in 2000 and 2003. There is no apparent trend in the number of cases over time.

**Slide 24. Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993–2005.** This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2005. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 57% in 2005, the latest year with available data. Among adults aged 25–44 years, the percentage increased from 46% to 67% in 2005. The numerator includes TB patients with positive, negative, or indeterminate HIV test results, and persons from California reported with AIDS (HIV test results are not reported to CDC from California).

**Slide 25. Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2005.** This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2005, the latest year with available data. Since the addition of the request for HIV status to the individual TB case report in 1993, incomplete reporting has provided a challenge to calculating reliable estimates. Results from the cross-matching of TB and AIDS registries have been used to supplement reported HIV test results. For all ages, the estimated percentage of HIV coinfection in persons reported with TB decreased from 15% to 7% overall and from 29% to 13% in persons aged 25 to 44 years during this period.

**Slide 26. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2004.** In 1993, the reporting areas began providing information about mode of treatment administration on the individual TB case report form. Treatment administered as only directly observed therapy (DOT) increased from 21% in 1993 to 57% in 2004, the latest year with available data. There was also an increase in the proportion of patients who received at least some portion of their treatment as DOT (based on combining the percentage of patients who received only DOT and the percentage for whom some portion was self-administered). In 2004, 84% of patients received at least some portion of their treatment as DOT.

**Slide 27. Completion of TB Therapy, United States, 1993–2004.** The reporting areas began providing information on completion of therapy in 1993 through the individual TB case report form. The calculations exclude patients with an initial isolate resistant to rifampin as well as children with meningeal, bone or joint, or miliary disease. Overall completion of therapy has remained at approximately 92% from 1998 through 2004. Completion in 1 year or less increased from 64% in 1993 to approximately 82% in 1998–2004, the latest year with available data. The current DHHS Healthy People 2010 objective is completion of therapy in 1 year or less in 90% of patients. CDC is working with state and local health departments to determine and evaluate reasons for apparently delayed completion of therapy, which may vary by jurisdiction.

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# Appendices





# Appendix A

## Tuberculosis Case Definition for Public Health Surveillance<sup>1</sup>

### Tuberculosis (Revised 9/96)

#### Clinical description

A chronic bacterial infection caused by *Mycobacterium tuberculosis*, characterized pathologically by the formation of granulomas. The most common site of infection is the lung, but other organs may be involved.

#### Clinical case definition

A case that meets all of the following criteria:

- A positive tuberculin skin test result; and
- Other signs and symptoms compatible with tuberculosis, such as an abnormal, unstable (i.e., worsening or improving) chest radiograph, or clinical evidence of current disease; and
- Treatment with two or more antituberculosis medications; and
- A completed diagnostic evaluation.

#### Laboratory criteria for diagnosis

- Isolation of *M. tuberculosis* from a clinical specimen,<sup>\*</sup> or
- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification test,<sup>†</sup> or
- Demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained

#### Case classification

Confirmed: a case that meets the clinical case definition or is laboratory confirmed

#### Comment

Only one case should be counted in a person within any consecutive 12-month period. However, a case in a patient who had previously had verified disease should be reported again if more than 12 months have elapsed since the patient was discharged from treatment. A case should also be re-reported again if the patient was lost to supervision for >12 months and disease can be verified again. Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in tuberculosis morbidity statistics unless there is concurrent tuberculosis.

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<sup>1</sup> CDC. *Case definitions for infectious conditions under public health surveillance*. MMWR 1997;46(No. RR-10):40-41.

<sup>\*</sup>Use of rapid identification techniques for *M. tuberculosis* (e.g., DNA probes and mycolic acid high-pressure liquid chromatography performed on a culture from a clinical specimen) are acceptable under this criterion.

<sup>†</sup>Nucleic acid amplification (NAA) tests must be accompanied by culture for mycobacteria species. However, for surveillance purposes, CDC will accept results obtained from NAA tests approved by the Food and Drug Administration (FDA) and used according to the approved product labeling on the package insert.



# Appendix B

## Recommendations for Counting Reported Tuberculosis Cases (Revised July 1997)

Since publication of the “Recommendations for Counting Reported Tuberculosis Cases”<sup>1</sup> in January 1977, numerous changes have occurred and many issues have been raised within the field of tuberculosis (TB) surveillance. This current version updates and supersedes the previous version; it clarifies the parameters for counting TB cases among (a) immigrants, resident aliens, and border crossers, (b) military personnel stationed in the United States and abroad, and (c) persons diagnosed within the Indian Health Service and correctional facilities.

A distinction should be made between **reporting** TB cases to a health department and **counting** TB cases for determining incidence of disease. Throughout each year, TB cases and suspected cases are reported to public health authorities by sources such as clinics, hospitals, laboratories, and health care providers. From these reports, the state or local TB control officer must determine which cases meet the current surveillance definition for TB disease. These verified TB cases are then counted and reported to the Centers for Disease Control and Prevention (CDC).

**I. Reporting TB Cases.** CDC recommends that health care providers and laboratories be required to report all TB cases or suspected cases to state and local health departments based on the current “Case Definition for Public Health Surveillance.”<sup>2</sup> This notification is essential in order for TB programs to

- Ensure case supervision,
- Ensure completion of appropriate therapy,
- Ensure completion of timely contact investigations,
- Evaluate program effectiveness, and
- Assess trends and characteristics of TB morbidity.

**II. TB Surveillance.** For purposes of surveillance, a case of TB is defined on the basis of laboratory and/or clinical evidence of active disease due to *M. tuberculosis* complex.\*

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\* Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. For example, one study in San Diego found that 6% of human tuberculosis was caused by *Mycobacterium bovis*; cultures from these cases would be reported by most laboratories as being positive for *M. tuberculosis* complex. Other species in the *Mycobacterium tuberculosis* complex include *M. africanum*, *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii*. Although *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii* are newly described species, their inclusion in *M. tuberculosis* complex should not impact public health laboratories or programs because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease and be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, and *M. canettii* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB, using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG strain of *M. bovis* should not be reported as TB because the transmission is iatrogenic (treatment-induced), rather than person-to-person or communicable.

**a. Laboratory Case Definition**

- Isolation of *M. tuberculosis* complex from a clinical specimen. The use of rapid identification techniques for *M. tuberculosis* performed on a culture from a clinical specimen, such as DNA probes and high-pressure liquid chromatography (HPLC), is acceptable under this criterion.

**OR**

- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification (NAA) test. NAA tests must be accompanied by cultures of mycobacterial species. However, for surveillance purposes, CDC will accept results obtained from NAA tests that are approved by the Food and Drug Administration (FDA).

**OR**

- Demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained; historically this criterion has been most commonly used to diagnose TB in the postmortem setting.

**b. Clinical Case Definition.** In the absence of laboratory confirmation of *M. tuberculosis* complex after a diagnostic process has been completed, persons must have **all** of the following criteria for clinical TB:

- Evidence of TB infection based on a positive tuberculin skin test result

**AND**

- One of the following:
  - (1) Signs and symptoms compatible with current TB disease, such as an abnormal, unstable (worsening or improving) chest radiograph, or
  - (2) Clinical evidence of current disease (e.g., fever, night sweats, cough, weight loss, hemoptysis)

**AND**

- Current treatment with two or more anti-TB medications

**NOTE:** The case definition described herein was developed for use in this document and is not intended to replace the case definition for TB as stated in the current “Case Definitions for Infectious Conditions Under Public Health Surveillance.”

*In addition, the software for TB surveillance developed by CDC includes a calculated variable called “Ver-crit,” for which one of the values is “Provider Diagnosis.” “Provider Diagnosis” is selected when the user chooses to override a “Suspect” default value in the case verification screen as “Verified by Provider Diagnosis.” Thus, “Provider Diagnosis” is not a component of the case definition for TB in the current “Case Definitions for Infectious Conditions Under Public Health Surveillance” publication. CDC’s national morbidity reports have traditionally included all cases that are considered verified by the reporting areas, without a requirement that cases meet the published case definition.*

**III. Counting TB Cases.** Cases that meet the current CDC surveillance case definition for verified TB are counted by 52 reporting areas with count authority (50 states, District of Columbia, and New York City) to determine annual incidence for the United States. The remaining 7 reporting areas (American Samoa, Federated States of Micronesia, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) report cases to CDC, but are not included in the annual incidence for the United States. The laboratory and clinical case definitions are the two diagnostic categories used by the CDC “Case Definitions for Infectious Conditions Under Public Health Surveillance.”

Most verified TB cases are accepted for counting based on laboratory confirmation of *M. tuberculosis* complex from a clinical specimen.

A person may have more than one discrete (separate and distinct) episode of TB. If disease recurs in a person within any 12-consecutive-month period, count only one episode as a case for that year. However, if TB disease recurs in a person, and if more than 12 months have elapsed since the person was discharged from or lost to supervision, the TB is considered a separate episode and should be counted as a new case. *Note:* Discharged from supervision implies completion of therapy.

Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in TB morbidity statistics unless there is concurrent TB.

**a. Verified TB Cases**

**COUNT**

Count only verified TB cases that meet the laboratory or clinical case definitions (see Section II). The diagnosis of TB must be verified by the TB control officer or designee. The current CDC surveillance case definition for TB describes and defines the criteria to be used in the case definition for TB disease.

**DO NOT COUNT**

If diagnostic procedures have not been completed, do not count; wait for confirmation of disease. Do not count a case for which two or more anti-TB medications have been prescribed for preventive therapy for exposure to multidrug-resistant (MDR) TB, or while the diagnosis is still pending.

**b. Nontuberculous Mycobacterial Diseases (NTM)**

**COUNT**

An episode of TB disease diagnosed concurrently with another nontuberculous mycobacterial disease should be counted as a TB case.

**DO NOT COUNT**

Disease attributed to or caused by nontuberculous mycobacteria alone should not be counted as a TB case.

**c. TB Cases Reported at Death**

### **COUNT**

TB cases first reported to the health department at the time of a person's death are counted as incident cases, provided the person had current disease at the time of death. The TB control officer should verify the diagnosis of TB.

### **DO NOT COUNT**

Do not count as a case of TB if there is no evidence of current disease at the time of death or at autopsy.

#### **d. Immigrants, Refugees, Permanent Resident Aliens, Border Crossers,\* and Foreign Visitors<sup>3</sup>**

### **COUNT**

Immigrants and refugees who have been screened overseas for TB and

- have been classified as Class B (B1, B2, or B3)<sup>4</sup> or resident aliens,
- are not already on anti-TB medications for treatment of TB disease, and
- are examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications,
- should be counted by the locality of their current residence at the time of diagnosis regardless of citizenship status.

Border crossers\* and permanent resident aliens who are diagnosed with TB and plan to receive anti-TB therapy from a locality in the United States for 90 days or more should be counted by the locality where they receive anti-TB therapy.

Foreign visitors (e.g., students, commercial representatives, and diplomatic personnel) who are diagnosed with TB, are receiving anti-TB therapy, **and** plan to remain in the United States for 90 days or more should be counted by the locality of current residence.

*\*Border crosser — defined, in part, by the U.S. Citizenship and Immigration Services (USCIS)<sup>3</sup> as “a nonresident alien entering the United States across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period.*

### **DO NOT COUNT**

TB cases in immigrants or refugees who have been classified as Class A with a waiver (TB, Infectious, Noncommunicable for travel purposes)<sup>4</sup> should not be counted as new cases even if the persons receive routine initial work-ups in the United States. TB in persons who are temporarily (<90 days) in the United States, for whom therapy may have been started but who plan to return to their native country to continue therapy, should not be counted in the United States.

#### **e. Out-of-State or Out-of-Area Residents**

### **COUNT**

A person's TB case should be counted by the locality in which he or she resides at the time of diagnosis. TB in a person who has no address should be counted by the locality that diagnosed and is treating the TB. The TB control officer should notify the appropriate out-of-state or out-of-area TB control officer of the person's home locality to (1) determine whether the case has already been counted to avoid "double counting," and (2) agree on which TB control office should count the case if it has not yet been counted.

### **DO NOT COUNT**

Do not count a case in a newly diagnosed TB patient who is an out-of-area resident and whose TB has already been counted by the out-of-area TB control office.

## **f. Migrants and Other Transients**

### **COUNT**

Persons without any fixed U.S. residence are considered to be the public health responsibility of their present locality and their TB case should be reported and counted where diagnosed.

### **DO NOT COUNT**

Cases in transient TB patients should not be counted when there is evidence that they have already been counted by another locality.

## **g. Federal Facilities (e.g., Military and Veterans Administration Facilities)**

### **COUNT**

Cases in military personnel, dependents, or veterans should be reported and counted by the locality where the persons are residing in the United States at the time of diagnosis and initiation of treatment.

However, if military personnel or dependents are discovered to have TB at a military base outside the United States but are referred elsewhere for treatment (e.g., a military base located within the United States), the TB case should be reported and counted where treated and not where the diagnosis was made.

### **DO NOT COUNT**

Do not count if the case was already counted by another locality in the United States.

## **h. Indian Health Service**

### **COUNT**

TB should be reported to the local health authority (e.g., state or county) and counted where diagnosed and treatment initiated. However, for a specific group such as the Navajo Nation, which is geographically located in multiple states, health departments should discuss each case and determine which locality should count the case.

### **DO NOT COUNT**

Do not count if the case was already counted by another locality.

#### **i. Correctional Facilities (e.g., Local, State, Federal, and Military)**

### **COUNT**

Persons who reside in local, state, federal, or military correctional facilities may frequently be transferred or relocated within and/or between various correctional facilities. TB in these persons should be reported to the local health authority and counted by the locality where the diagnosis was made and treatment plans were initiated.

### **DO NOT COUNT**

Do not count correctional facility residents' TB cases that were counted elsewhere by another locality or correctional facility, even if treatment continues at another locale or correctional facility.

#### **j. Peace Corps, Missionaries, and Other Citizens Residing Outside the United States**

### **DO NOT COUNT**

TB in persons diagnosed outside the United States should not be counted. TB in these persons should be counted by the country in which they are residing regardless of their plans to return to the United States for further work-up or treatment.

## **IV. Suggested Administrative Practices**

To promote uniformity in TB case counting, the following administrative procedures are recommended:

- (a) All TB cases verified by the 52 reporting areas with count authority (50 states, District of Columbia, and New York City) during the calendar year (by December 31) will be included in the annual U.S. incidence count for that year. All tuberculosis cases verified during the calendar year by a reporting area with count authority from one of the remaining 7 reporting areas (American Samoa, Federated States of Micronesia, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) are also counted but are not included in the annual incidence for the United States. Cases for which bacteriologic results are pending or for which confirmation of disease is questionable for any other reason should not be counted until their status is clearly determined; they should be counted at the time they meet the criteria for counting. This means that a case reported in one calendar year could be included in the morbidity count for the following year. The reporting area with count authority should ensure that there is agreement between final local and state TB figures reported to CDC. Currently, some reporting areas may not use this suggested protocol. Some of these areas may wait until the beginning of the following year when they have received and processed all of the TB cases for inclusion in the annual case count for the previous year. If reporting areas decide to revise their protocols, they should be aware that their TB trends may change.

- (b) TB is occasionally reported to health departments over the telephone, by letter or fax, or on forms other than the Report of Verified Case of Tuberculosis (RVCT). Such information should be accepted as an official morbidity report if sufficient details are provided; otherwise, the notification should be used as an indicator of a possible TB case (suspect) which should be investigated promptly for confirmation.

## V. TB Surveillance Definitions

**Case** - an episode of TB disease in a person meeting the laboratory or clinical criteria for TB as defined in the document “Case Definitions for Infectious Conditions Under Public Health Surveillance”<sup>2</sup> (see Section II for criteria).

**Suspect** - a person for whom there is a high index of suspicion for active TB (e.g., a known contact to an active TB case or a person with signs or symptoms consistent with TB) who is currently under evaluation for TB disease.

**Verification of a TB case** - the process whereby a TB case, after the diagnostic evaluation is complete, is reviewed at the local level (e.g., state or county) by a TB control official who is familiar with TB surveillance definitions; if all the criteria for a TB case are met, the TB case is then verified and eligible for counting.

**Counting of a TB case** - the process whereby a reporting area with count authority evaluates verified TB cases (e.g., assesses for case duplication). These cases are then counted for morbidity in that locality (e.g., state or county) and reported to CDC for national morbidity counting.

***Mycobacterium tuberculosis* complex** (*M. tuberculosis* complex) - Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. For example, one study in San Diego found that 6% of human tuberculosis was caused by *Mycobacterium bovis*; cultures from these cases would be reported by most laboratories as being positive for *M. tuberculosis* complex. Other species in the *Mycobacterium tuberculosis* complex include *M. africanum*, *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii*. Although *M. microti*, *M. canettii*, *M. caprae*, and *M. pinnipedii* are newly described species, their inclusion in *M. tuberculosis* complex should not impact public health laboratories or programs because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease and be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, and *M. canetti* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB, using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG



strain of *M. bovis* should not be reported as TB because the transmission is iatrogenic (treatment-induced), rather than person-to-person or communicable.

**Nontuberculous mycobacteria (NTM)** - mycobacteria other than *Mycobacterium tuberculosis* complex that can cause human infection or disease. Common nontuberculous mycobacteria include *M. avium* complex or MAC (*M. avium*, *M. intracellulare*), *M. kansasii*, *M. marinum*, *M. scrofulaceum*, *M. chelonae*, *M. fortuitum*, and *M. simiae*. Other terms have been used to represent NTM, including MOTT (mycobacteria other than TB) and “atypical” mycobacteria.

**Reporting area** - areas responsible for counting and reporting verified TB cases to CDC. Currently there are 60 reporting areas: the 50 states, District of Columbia, New York City, American Samoa, Federated States of Micronesia, Guam, Northern Mariana Islands, Marshall Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands. The annual incidence of tuberculosis for the United States is based on 52 reporting areas (the 50 states, District of Columbia, and New York City).

**Alien** - defined by the U.S. Citizenship and Immigration Services (USCIS)<sup>3</sup> as “any person not a citizen or national of the United States.”

**Border crosser** - defined, in part, by the USCIS<sup>3</sup> as “a nonresident alien entering the United States across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period.

**No TB Classification** - Applicants with normal tuberculosis screening examinations.

**Class A TB with waiver** - All applicants who have tuberculosis disease and have been granted a waiver.

**Class B1 TB, Pulmonary -**

**No treatment**

- Applicants who have medical history, physical exam, HIV, or CXR findings suggestive of pulmonary tuberculosis but have negative AFB sputum smears and cultures and are not diagnosed with tuberculosis or can wait to have tuberculosis treatment started after immigration.

**Completed treatment**

- Applicants who were diagnosed with pulmonary tuberculosis and successfully completed directly observed therapy prior to immigration. The cover sheet should indicate if the initial sputum smears and cultures were positive and if drug susceptibility testing results are available.

**Class B1 TB, Extrapulmonary** - Applicants with evidence of extrapulmonary tuberculosis. Document the anatomic site of infection.



**Class B2 TB, LTBI Evaluation** - Applicants who have a tuberculin skin test  $\geq 10$  mm but otherwise have a negative evaluation for tuberculosis. The size of the TST reaction, the applicant's status with respect to LTBI treatment, and the medication(s) used should be documented. For applicants who had more than one TST, whether the applicant converted the TST should be documented (i.e., initial TST  $< 10$  mm but subsequent TST  $\geq 10$  mm).

**Class B3 TB, Contact Evaluation** - Applicants who are a recent contact of a known tuberculosis case. The size of the applicant's TST reaction should be documented. Information about the source case, name, alien number, relationship to contact, and type of tuberculosis should also be documented.

**Immigrant** - defined by the USCIS<sup>3</sup> as “an alien admitted to the United States as a lawful permanent resident. Immigrants are those persons lawfully accorded the privilege of residing permanently in the United States. They may be issued immigrant visas by the Department of State overseas or adjusted to permanent resident status by the USCIS of the United States.”

**Permanent Resident Alien** - see Immigrant.

**Waivers** - A provision allows applicants undergoing pulmonary or laryngeal tuberculosis treatment to petition for a Class A waiver. Waivers should be pursued for any immigrant or refugee who has a complicated clinical course and would benefit from receiving treatment of their tuberculosis in the United States. Applicants diagnosed with tuberculosis disease who are both smear- and culture-negative and will be traveling to the United States prior to start of treatment do not need to complete the waiver process.

## References

1. *Recommendations for Counting Reported TB Cases*. Atlanta: CDC, January 1977.
2. CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(No. RR 10):40–41.
3. *Statistical Yearbook of the Immigration and Naturalization Service, 1994*. Washington, DC: US Department of Homeland Security, U.S. Citizenship and Immigration Services; <http://uscis.gov>.
4. *CDC Immigration Requirements: Technical Instructions for Tuberculosis Screening and Treatment, 2007*. Atlanta: CDC, Division of Global Migration and Quarantine, revised September 2007; [http://www.cdc.gov/ncidod/dq/pdf/ti\\_tb\\_8\\_9\\_2007.pdf](http://www.cdc.gov/ncidod/dq/pdf/ti_tb_8_9_2007.pdf).

## Notes

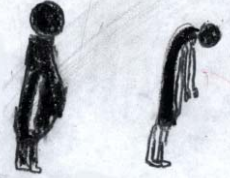
1. Reference to details of FDA-approved labeling for NAA (IIa) was deleted from this document in September 2002.
2. A note of clarification was added to Section III, Counting TB Cases, in September 2003.

# Stay Safe From TB

See  
The Doctor



Weight Loss



Let the  
Nurse Help

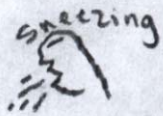


Feel good!

How does  
TB spread?



Take the  
skin test

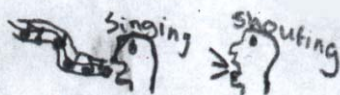


Coughing  
Sneezing



Chest pains

Shouting  
Singing



Take your  
Medicine

